A Clinical Lecture ON DIAGNOSIS,

Delivered at University College Hospital on November 18th, 1875.

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(*Reported by* Mr. G. BUCKSTON BROWNE.)

GENTLEMEN,—You will recollect I announced at our last meeting that the subject for our inquiry to-day would be the Diagnosis of Diseases of the Urinary Organs. Now let me remind you at first starting that the diagnosis of disease is the one important thing that you come to the hospital to learn.

I know that the youth, when entering on his professional career, and also that heterogeneous body which is designated "the public," and to whom he at present belongs, regard, and quite naturally, the treatment of disease as the great subject which is to occupy all his time and powers. True it is his final object, but it is essential for him to know that the art of diagnosis is far more difficult and important to attain, that it demands labour, study, and experience, and that without it treatment is useless, or even worse, for it may be injurious. But let him be assured that if the diagnosis be intelligently made, then treatment is comparatively easy.

It must be admitted, however, that there is some difference between medicine and surgery in relation to this statement. The medical art may almost be said to culminate in diagnosis. I can remember the time when to distinguish between mitral disease and functional disturbance was more a matter of guess-work than of demonstration. At that period the early presence of phthisis was undistinguishable, and the arrival of its later stages a subject for widely differing opinions even among experienced men. These conditions verified, however, as is quite possible to the advanced among you, thanks to modern methods of physical examination, there can be small difficulty about the treatment, and little difference of opinion.

In surgery the diagnosis is no less important, but the treatment is less easy. The operative measures which often follow demand practical skill and certain other qualifications. Even here, however, diagnosis must take the first place, because operative treatment, being often of a very grave character, cannot be undertaken until after a correct and intelligent appreciation of the facts has been obtained.

What is diagnosis? It consists, first of all, in the acquisition of facts; and, secondly, in obtaining legitimate inferences from those facts.

Now the acquisition of facts is one of the most difficult things in the world. No two persons ever agree in their statements descriptive of an occurrence to which they both have been witnesses. If I bring a case of disease before you here, and ask ten of you to take as many histories of it, I will undertake to say that each one will materially differ, and that I shall get ten histories, varying from each other in some important particulars. Each will be approximately true; none will be absolutely correct. You must then diligently learn to observe, and to do so well requires special qualities and much practice. Is it not a very striking illustration of what I have said, that if two witnesses relate precisely similar stories of any given event, the suspicion of collusion is always instantly suggested, and is, indeed, very naturally aroused? It has often struck me that the qualities which men of our profession require, and which we should endeavour to cultivate, are precisely such as are necessary to those who are engaged in the exercise of the legal profession; and the men who are really successful in either profession have much in common in intellectual character and attainment. In our profession, equally with that of the law, careful examination of the statement, acute and subtle cross-examination of the witness, and a keen pursuit of the simple fact are essential; and, finally, a calm judicial habit of weighing the facts when obtained. And in both professions the issues raised are equally weighty, and demand in either case the highest qualifications in the individual.

But next, I have not only to call your attention to the necessity for making a careful and accurate diagnosis, it is equally important that you should learn to make a *rapid* one. For it must be admitted that our proceedings differ from those of the law in this respect; for while, as we have seen not so long ago, several months may be devoted to the critical investigation of a legal claim, and a considerable period of time must mostly be expended on the proof or disproof of any allegation, our decisions are required without delay. While the doctors are deliberating the patient is dying. Hence you see that the ability to arrive at a diagnosis rapidly often constitutes the essence of success. This art, also, it is my aim to teach you so far as I can.

To this end, and what I have to say applies to all departments of our art, I advise you always to pursue a uniform method. Order and uniformity are essential elements in directing the necessary investigation; and after much thought and experiment, for my own private guidance as well as for yours, I have adopted the following system. Relative to the class of diseases we are studying, there are three methods of obtaining the facts required:—Firstly, by questions of the patient; secondly, by physical examination of the body; thirdly, by examination, chemical and otherwise, of the secretions.

First, by questions. There are four chief questions which I always employ, and always in the same order. They ought, with the minor inquiries which branch out of them, to determine six out of seven cases which come to you. They relate to four signs and symptoms more or less met with in patients affected with complaint in any part of the urinary organs. Frequent micturition; painful micturition; deviation in the character of the urine itself from the healthy standard; the addition of blood to the urine.

The first question, then, which I invariably ask to any patient so affected is, "Have you any, and, if any, what frequency in passing water?" Then, as a branch of that question, springing out of it, I ask whether the frequency is more by day or by night, or influenced by movements, or by any particular circumstance? How the question applies I will tell you afterwards.

Then, secondly, I ask whether there is pain in passing urine, and whether before, during, or after micturition? Inquire also if pain is felt at other times, and if produced or aggravated by quick movements of the body. The locality of the pain is also to be precisely ascertained.

Then I ask, as a third question, "Is the character of the urine altered in appearance, or is there anything unusual in the stream itself? Is the urine turbid or clear?" Possibly the patient will tell you that it is turbid, but you find, on questioning further, that it was passed perfectly clear, and only became thick after cooling or standing. Also, as arising out of this, you may often ask, "Does it vary much in quantity?" noting of course the specific gravity. The healthy standard, both as regards quantity and density, however, must be allowed very extensible limits, and both, I need not tell you, are very important elements in regard of renal disease. Then, as regards the stream itself, it may be small, forked, or twisted, or it may stop suddenly when flowing.

The fourth and last question is, whether blood has been passed in any way with the urine; whether the mixture is florid or brown, light or dark; whether the blood and urine are intimately mixed, or whether the blood is chiefly passed at the end or at the beginning of making water; or, lastly, whether it issues independently of micturition altogether.

After dilating on these inquiries and showing the manner in which, by their aid, the differential diagnosis of various diseases could be easily established, Sir Henry Thompson proceeded to describe the methods and instruments necessary for prosecuting physical and other examinations of the patient and of his secretions.

ON A CASE OF

SIMULTANEOUS EMBOLISM OF CENTRAL RETINAL AND MIDDLE CEREBRAL ARTERIES.

BY W. R. GOWERS, M.D.,

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SEVERAL cases of retinal embolism have been recorded in which there also occurred at some other time embolism of a cerebral artery. In the following case the two accidents appear to have been simultaneous. This rare coincidence, and the circumstance that a post-mortem examination enabled the diagnosis to be verified, render the case one of considerable interest. The patient was in University College Hospital, under the care of Sir William Jenner, to whom I am indebted for permission to publish my notes of the ocular condition, and the account of the general symptoms and of the post-mortem appearances, which are taken from the hospital case-book. It will be convenient to describe, first, the case in its general aspect; and, afterwards, the ophthalmoscopic appearances, and the results of the microscopical examination of the eyeball.

C. H. H——, aged thirty, carpenter, a healthy-looking man, was admitted Jan. 29th, 1870. In early life he had an attack of "low fever," attended by pains in the joints, followed by chorea and by weakness in his right arm. A year later he had a similar, less severe, febrile attack. During the six months before his present illness he suffered from cough, shortness of breath, and occasional slight hæmoptysis.

Without premonitory symptoms, he suddenly, when out walking, lost consciousness, was picked up insensible, and brought to the hospital. Soon after his admission he had partly recovered consciousness. There was then complete paralysis of the right arm and leg, and slight paralysis of the face. At the heart there was a loud systolic apex-murmur, with accentuated pulmonary second sound, and evidence of dilatation of the left ventricle, the impulse extending outside the nipple line in the fifth interspace. The urine contained no albumen.

On the following day he had so far recovered consciousness as to be able to speak, but answered "Yes" to all questions, uttering no other word. He turned on his back when told, but opened his mouth when told to shut his eyes. His stools and urine were passed unconsciously.

Three days after his admission he still answered "yes" and "no" indiscriminately to all questions. The hemiplegia continued unchanged. A day later, when asked where he suffered pain, he answered "in the head," but when asked his name he answered only "yes, no."

In this state he continued for some weeks.

On February 21st it was noted that there was slight improvement both in limbs and speech. When the assistant, Mr. Price, went up to his bedside he attempted to say something, but only got out "ning." On Mr. Price suggesting "good morning," he immediately repeated it. When trying to converse with other patients, one of them began to sing a song, and while singing the first verse H—— hummed it with him, and then took it up and sang the second verse by himself, articulating the words fairly well. Afterwards, however, he was able to speak no better than before.

In the beginning of March he became worse, began to vomit food and cough up blood. The heart's action became more feeble and irregular, so that the murmur could be heard only with a few beats of the heart. The legs became œdematous, that of the right being greatest, the right arm also. The urine contained blood. The paralysis of the face had increased a little, but he had become able to move the leg slightly as he lay in bed.

By the middle of March all the evidences of cardiac failure were more intense, and on the 20th he got some œdema of the left arm, with hæmorrhagic spots up to the bend of the elbow. Signs of effusion into the right pleura showed themselves. On the 25th the distension of the left arm became extreme, bullæ formed on the right foot, and hæmorrhage occurred from the nostril. He lingered until the 29th, when he died.

Post-mortem examination.—Brain: There was a little excess of fluid under the arachnoid, but no general flattening of convolutions. The ventricles contained no excess of fluid. The right hemisphere was healthy throughout. In the left hemisphere were two lesions. The smaller was an area of softening on the outer surface of the left hemisphere, at the posterior part of the parietal lobe; it measured one inch by three-quarters. The two corpora striata presented a marked difference. The left was less full than the right, especially behind; the lining membrane of the ventricle over it was opaque, and the vessels too numerous; and at its junction with the optic thalamus it was softened over an area three-quarters of an inch in diameter, and of a yellowish colour. On section the disease did not extend into the optic thalamus, but passed outwards to the fissure of Sylvius, the tint of the softened portion varying from creamy white to pale orange. Convolutions of the island of Reil destroyed; lowest frontal convolution a little damaged. The arteries at the base appeared healthy. The right middle cerebral contained fluid blood. In the left middle cerebral, within the Sylvian fissure, was a clot half an inch long, colourless, firm, easily detached near the orifice of the artery, but above adherent to the inner coats. On each side of the clot was a little fluid blood. Branches from this occluded artery passed directly into the diseased portion of the corpus striatum. The anterior cerebrals and anterior communicating arteries were empty. The heart was much diseased. The mitral orifice was thickened and roughened, and calcareous on its auricular surface. Old clots were contained in the auricular appendices and in the apex of the right ventricle. In the lungs were numerous angular patches of pulmonary apoplexy. Each kidney contained an infarct pyramidal in shape, the base on the surface. A similar infarct was contained in the spleen.

Condition of eye.—Four days after his admission into the hospital, and five days after the onset of the paralysis, an ophthalmoscopic examination was made for the first time. Only the indirect method of examination was employed. The fundus of the right eye was found to be normal. In the left eye the optic disc could not be distinguished, being veiled by a greyish-white cloud; its position could be noted by the convergence of the vessels. Another white cloudy opacity of considerable size existed in the retina near the yellow spot. Both these had soft edges, were moderately white, and the retinal vessels appeared partly concealed by them. The arteries were small, the veins large and distinct.

On the following day the appearances in the eye were nearly the same, the white opacity in the centre of the fundus being continuous with that near the optic disc. In front of the former a distended vessel crossed transversely just above the position of the yellow spot, and small twigs passing from this vessel at right angles on each side were abnormally conspicuous against the white background. On examination it was clear that he could not see with this eye.

During the next week these white patches gradually lessened, and the outline and surface of the disc became clear. As the vessels became more visible the diminished size of the arteries was distinct. By Feb. 18th the large white patch near the yellow spot had gone, leaving only a little irregular cloudy and granular whiteness. The optic disc was quite distinct in its inner portion, while the outer half was still somewhat hazy. A line of whitish opacity extended upwards and outwards towards the yellow spot, and, curving round and becoming fainter, blended with the traces of the mischief near the yellow spot. In the first part of its course it accompanied a vessel. Below the disc was another limited opacity bounded on each side by a vessel.

The veins were all perceptible and tolerably uniform. The arteries were much narrowed on the optic disc and for some distance around; they appeared mere threads. Not very far from the disc, at a distance variable in different vessels, but usually about twice the diameter of the disc, they again became conspicuous. There was a distinct darkish opacity of the retina all round the optic disc.

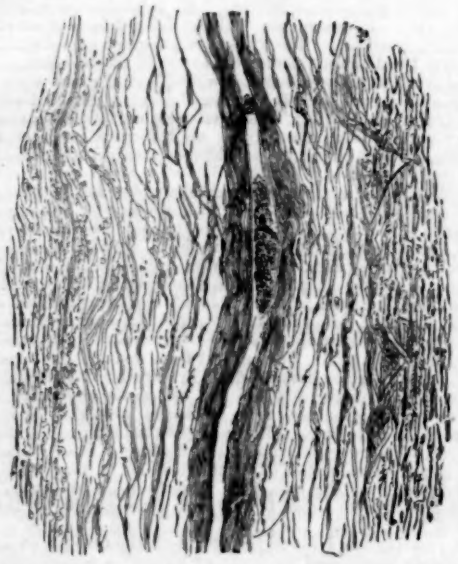
On March 1st the optic disc remained clear; the vessels, both arteries and veins, had diminished in size, the former, on the disc, being reduced to the merest threads. They

were narrower at a distance from the disc than formerly. In one vein the column of blood was interrupted, for the vessel appeared as if empty for a little space.

On March 13th it was noted that the disc had become whiter, and its edges well-defined and clear, but a little uneven. The remains of opacity below and above the disc were still there, but less conspicuous. The veins were rather smaller than when last examined, and the diminution in size was chiefly noticeable near the disc, where they appeared considerably narrower than in the equatorial region. One small vein could not, with the indirect image, be seen close to the disc, but reappeared a short distance away. The arteries on the disc itself were just visible as lines, and some of them could not be distinguished against the choroid near the disc. All, however, became more perceptible at about two disc-breadths from its edge, and towards the equatorial region became much larger than near the disc, though smaller than when first observed. This condition continued until he died.

For microscopical examination, longitudinal sections of the optic nerve and disc were made, after hardening in weak chromic acid. The central artery in the optic nerve was dilated here and there, but for the most part so contracted that its calibre was reduced in places to a mere line. It was somewhat tortuous. The walls were thick, but only in proportion to the contraction of the artery. There was no plication of the inner layer. The dilated portions corresponded in some instances to the passage of a branch from the artery into the substance of the optic nerve. Just behind the division of the artery in the disc was a dilatation of some size. But in the disc itself, the main branches of the artery were reduced to very narrow dimensions, the cavity of one being only $\frac{1}{1\,5\,0}$ in. in diameter, and that of another reduced to a mere line.

Here and there, chiefly in the substance of the nerve, but to a less extent also in the disc, minute granular masses could be seen in the vessels. The largest of these, represented in the woodcut, was situated in the main trunk in



Longitudinal section of central artery of retina, one-eighth of an inch behind the lamina cribrosa. On each side is loose cellular tissue, and beyond this the longitudinal nerve-fibres are indicated. Within the contracted vessel is an oval granular mass, and in front of this a smaller spherical body. Magnified 300 diameters.

the substance of the optic nerve, about one-eighth of an inch behind the lamina cribrosa. It is an elongated plug, $\frac{1}{1\,0}$ of an inch in length, and about $\frac{1}{7\,0}$ of an inch in width, coarsely granular in appearance, containing many dark points. It apparently did not quite fill the vessel, having doubtless shrunk from the sides while the specimen was being hardened. A little distance in front of this was a small spherical mass. Further back the vessel was for some distance reduced to a very narrow size, hardly any cavity being visible; but here and there a little granular mass could be noticed within it. Further back it again widened out, and then narrowed. In one of the narrowed arteries on the disc a quantity of granular material could be perceived. The veins on the disc were reduced in bulk, but were much larger than the arteries. No capillaries in the disc or about the lamina cribrosa could be perceived. In the retina beyond the limits of the disc, however, about a disc's breadth from its edge, numerous dilated capillaries could be seen, running inwards through the nerve-fibre layer, some vertically, others at an inclination. They appeared as if passing from the choroid to the surface of the retina; but they could not be traced towards the choroid beyond the cellular layers of the retina.

The nuclei in the optic nerve were not more abundant than normal, but the nerve-fibres showed some commencing degeneration, a few globules of myelin being scattered among them. The disc was not swollen, its height above the level of the choroid being within the normal limits. The minute round nuclei which commonly lie among the nerve-fibres in the disc were increased in number, and in places were accumulated in oval heaps between the bundles of nerve-fibres. The layer of nerve-fibres passing on to the retina appeared a little swollen; but its thickness, a disc's breadth from the edge of the disc, was only $\frac{1}{7\,0}$ of an inch, the fibres being here and there very slightly varicose, and lying less closely together than is usual. The cellular layers of the retina near the disc were in some parts normal, or nearly so, the ganglion cell-layer, the two nuclear and the internuclear layers being distinct, the former only in places a little thickened by the increase in the number of corpuscles composing them. (The layer of rods and cones was nowhere distinguishable as such, doubtless from the time which elapsed after death before the post-mortem examination was made.) On another side of the disc, however, probably where the opacity was noticed during life, the whole thickness of the retina was infiltrated with minute corpuscles resembling those of the nuclear layers. In these layers they were more closely aggregated, but they filled also the internuclear layer, and were scattered less closely through the molecular layer. The retinal layers were also a little sinuous. These changes were noted especially in the portion of the retina beneath the thickened nerve-fibre layer.

Near the macula lutea some irregularities in the surface of the retina could be noticed on looking at it with a simple lens. These depended partly on ramifying vessels and partly on the retina being raised in minute folds. The microscopical examination showed considerable though variable change. In some places all distinction of layers was lost; small round corpuscles resembling those of the nuclear layers, but staining less readily with logwood, infiltrated the whole thickness of the retina, the only other structure perceptible being the remains of the vertical fibres of the retina, themselves thickened, among which the nuclei lay. In other places the fibres of the internuclear layer (here, of course, always wide) were separated, spaces between them being left, and the nuclear layers being normal, as in simple œdema. In some places round corpuscles were scattered through this layer; in other parts the molecular layer was infiltrated with small round corpuscles lying amid a granular matrix. The external nuclear layer was also in places considerably thickened. Where the retina was raised in a fold, this layer on the concave side was sinuous, and between the contiguous folds the layer of rods and cones had disappeared, and the space was filled up by a considerable quantity of granular material, in which a few round corpuscles could be distinguished. The pigment epithelium was in this part in close contact with and adherent to the external nuclear layer.

Remarks.—There can be no question as to the nature of the case. The discovery of masses of granular material in the central artery and its branches, and the absence of any hæmorrhage around the vessel, the occurrence of undoubted embolism in the middle cerebral artery and in the kidneys and spleen, the correspondence of the retinal changes, vascular and parenchymal, to those observed in other instances of embolism, render the nature of the case unquestionable. The condition of the retina when

first examined agrees closely with that observed in other cases a few days after the occurrence of embolism. Hence it is probable in the highest degree that the retinal and cerebral embolisms were simultaneous.

What was the position of the obstruction? I do not think that the plug figured can be regarded as that which effected the closure of the artery. Its size is not sufficient, and there is no narrowing of the vessel at the spot to account for the arrest of so minute a plug. The artery also was contracted behind it, and the contraction extended, with intervals of dilatation, as far back as the examination of the optic nerve extended, which was nearly, but not quite, as far as the entrance of the central artery into the substance of the nerve. The artery was traced, with the scalpel, from its origin from the ophthalmic as far as its entrance into the nerve, and no plug was seen, but a microscopical examination of the vessel was not made. The numerous fragments of fibrin to be seen in the vessels of the nerve and disc show how much material must have been discharged into the vessel at the time of the embolism. It is probable that the chief obstruction was situated where the artery enters the nerve.

A ready collateral circulation must have been established, for the arteries, as seen with the ophthalmoscope, maintained their thread-like dimensions only for a very short distance after leaving the disc, and then resumed a distinct though diminished contour. The blood reached them no doubt from the posterior ciliary arteries. It is often assumed that the vessels of the disc form an important part of the means of communication. The opinion rests on the statement of Leber that the disc is supplied by the posterior ciliaries. But surely the marked and increasing pallor of the disc in this and in almost all cases of embolism is in contradiction to the assumption. An exception was the case of Wecker's,* in which an obstruction of a branch of the artery was followed by increased vascularity of the corresponding portion of the disc. But the case stands alone. Pallor of the corresponding part of the disc is more common, as Mr. Nettleship has lately pointed out; and in a patient of Mr. Streatfeild's, whom I saw some time ago, in which there was obstruction (doubtless from embolism) of one branch, with corresponding segmentary loss of sight, there was not a trace of increased vascularity in the corresponding portion of the disc. The pallor of disc in these cases depends, as Gradenigo† has pointed out, on anæmia, rather than on tissue proliferation. No capillaries were visible, although carefully looked for, in the case I have just described; and neither the tissue-formation nor the degeneration of the nerve-fibres was sufficient to account for the pallor. But there was distinct distension of small vessels in the retina outside the limits of the disc, and it is, I think, clear that it was by the vessels near the papilla, and not by those in the disc, that the collateral circulation had been set up.

The retinal appearances, as seen with the ophthalmoscope, do not differ in any material point from those of most other cases recorded. It is, however, to be noted that when first examined, five days after the presumed onset, the opacity of the retina was as marked around the disc as around the macula lutea. Moreover, the red spot at the macula lutea, so often described, was absent.

This fact is of interest in connexion with the diagnosis of embolism within the artery from hæmorrhage around it. The absence of a red spot at the macula and the presence of early infiltration around the disc are given by Magnus as diagnostic indications of hæmorrhage around the nerve. In the case now described, unquestionably embolic, the spot at the macula was absent, and by the fifth day the infiltration around the papilla was very marked.

The anatomical changes in the retina corresponded to the opacity observed during life, and still present, although in less degree, at the time of death. They indicate more structural change than is, I think, commonly supposed to occur in these cases. The adhesion of the pigmentary epithelium to the outer nuclear layer may perhaps be taken as evidence that the destruction of the layer of rods and cones at this part was not a mere post-mortem change, but occurred during the active processes consequent on the arterial obstruction.

* Atlas, p. 140, note.
† Gottardi, Giornale de Med. Mil., July 1875, p. 22.

ON A CASE IN WHICH IRRITABILITY OF THE FEMALE BLADDER OF FIFTEEN YEARS' STANDING WAS CURED BY DILATATION OF THE URETHRA AND NECK OF THE BLADDER.*

BY H. BENDELACK HEWETSON, M.R.C.S.

THE notes of the case I am about to relate are of extreme importance in connexion with an operation, still on its trial, introduced by Mr. Pridgin Teale, and but recently published,† which comprises dilatation of the urethra in the female for the relief of irritability of the bladder, and, as in this case, occasional retention of urine. The absolute success attendant upon its performance in some cases, and its partial, if not complete, failure in others, render it incumbent on us to keep strict records of the symptoms, general as well as local, which affect females the subjects of irritable bladder upon whom this operation is performed. The extent to which the dilatation of the urethra is carried should especially be noted, since the partial or complete failures may possibly be the result of too cautious stretching from fear of producing incontinence of urine. Moreover, the general symptoms must be taken into account, for it may be that it is upon them the surgeon is consulted, without the slightest reference being made (as this case will show) to the more delicate point of irritability of the bladder; when it is upon the latter trouble that the general malaise depends.

Following are the notes of the case:—

Miss M——, aged thirty-six, sent for me on the night of March 3rd, 1875. On arrival at her home, I found her to be suffering intensely from retention of urine. I relieved her (by the use of the catheter) of a large quantity of urine, such an amount as must have distended the bladder nearly if not quite up to the umbilicus. This point I did not test, being anxious to relieve her without delay from the worst agony of retention. The retention returned in a day or two, and I had again recourse to the use of the catheter.

Her previous history is as follows:—That she was a perfectly strong and robust woman, following the *arduous* duties of a "present day" schoolmistress until fifteen years ago, when she was seized with an inflammation of the bladder, for such it was termed by her medical attendant. This was followed by the formation of a small abscess in the region of the urethra, which discharged of itself. Since that time her health has been bad, preventing the continuance of her calling. She states that since her recovery from this attack, her nights have been wakeful and disturbed by being constantly "every half hour or hour" obliged to get up to pass small quantities of urine with great effort and some pain. She is low and depressed, with almost constant headache, loss of appetite, and continual bearing down, resulting in a total unfitness for prolonged exertion of any kind. She has lost flesh considerably, and has for several years been set down by her numerous friends and medical advisers, to whom she had made no reference to her urinary troubles, as a confirmed invalid. These symptoms were complicated a year ago by pain in passing the motions, which were infrequent and confined. She had not been seized by retention of urine previous to March last. In February last she was, with "questionable propriety," advised to come to Leeds to stay with some friends for the good of her health.

On examination I found the orifice of the urethra to be completely surrounded by warty growths of a considerable size, and on examining the rectum the introduction of the finger was impeded by a very tight sphincter ani. The rectum was baggy, and there was a small external pile. The uterus was in its natural position, and the catamenia were, and had always been, regular, and the urine was natural. Not being able to estimate to what extent the retention was due to the warty growths, and seeing she was suffering considerably from rectal difficulties, I deemed it advisable to negative the possibility of the retention being caused by the warty growths by removing them, and whilst the patient

* Read before the Leeds and West Riding Medico-Chirurgical Society, Oct. 1st, 1875.
† Vide THE LANCET of Nov. 27th, 1875.

was under the influence of an anæsthetic stretching the sphincter ani with the forefingers introduced back to back sufficiently forcibly to paralyse it for a time and allow the sore produced by the snipping off of the pile to heal; in the same way as one would cure a fissure of the anus, by setting the spasm of the sphincter ani at rest, which, constantly contracting, might possibly be an element, through reflex action, in helping to keep up the vesical irritability.

Accordingly, on March 5th, chloroform having been administered, I completely carried out the above suggestions. The result of this was, that during the next few weeks relief was given to the retention of urine and to the pain in passing the motions; but there was no relief at all from the vesical irritability. Her general condition, with these exceptions, continued as before, and there was a return of the retention of urine at the end of three weeks from the operation.

I had clearly told her a second operation would possibly be necessary should the first fail to give relief, and accordingly, on April 11th, I again placed her under the influence of chloroform, and introducing Weiss's female dilator into the urethra to the extent of about two inches, I then *slowly* separated the blades of the dilator, stretching the urethra so as to admit of the introduction of my forefingers within the bladder while the parts were on the stretch. On closing the blades and withdrawing the instrument, the urethra contracted upon my little finger, so as sensibly to grip it when introduced into the bladder, the coats of which were thickened. There was no foreign body or stone to be detected.

She was very much upset by the chloroform-sickness, which continued more or less all night; there was, however, *no more irritability of the bladder, no retention, no incontinence produced*, and, to use her own words, "I have not passed water so freely for years"; nor had she retained it so long without being disturbed, for the first time she made water was in the evening after the operation, and she was not disturbed during the whole night.

April 14th.—She slept the night through, and awoke with little or no headache, retaining and passing her water quite naturally with the exception of some soreness.

16th.—She complains of slight pain while passing water, but perfect facility.

19th.—She got up in the evening complaining of none of her former symptoms, having lost completely all trace of vesical irritability in eight days from the dilatation of the urethra.

Her progress now continued to be satisfactory and very rapid.

May 4th.—She reports her old symptoms to have all disappeared. She sleeps and eats well, and takes a fair amount of exercise.

At this stage I ordered her into the country, where she resides, and returning on May 31st, she reported herself as perfectly well, and has gained three stones in weight. On the day previously she had walked a distance of eight miles without feeling more than ordinary fatigue, and remarked that before the operation "she could hardly trail herself about."

Thus, then, were the miserable and intractable sufferings of years, shutting out this poor woman alike from society and employment, put an end to at once by an operation whose best recommendation is its simplicity and its success.

Leeds.

CASE OF HIGH TEMPERATURE IN RHEUMATIC FEVER TREATED WITH THE WET PACK.

BY T. CARLETON RAILTON, M.B. LOND., F.R.C.S. ENG.

ELLEN G——, aged twenty, a housemaid, after having complained for two days of not feeling very well, and of pain in her right wrist, was sent to bed on June 25th, 1874, with all the symptoms of rheumatic fever. The pulse was 100, full and soft; both wrists were painful, and slightly swollen, and there was a copious perspiration, having the usual sour odour. The only treatment adopted at this stage was an opiate mixture to relieve the pain, together with the wrapping up of the affected joints in cotton wadding.

On June 26th the pain in the wrists had become more severe, and was accompanied by pain in one knee and in the back. The temperature taken at 10 A.M., in the axilla, was 102° F. Upon auscultating the chest, a mitral regurgitant murmur, soft in character, was perceived; this was treated by the application of one of Rigollot's mustard leaves over the cardiac region, followed by a constant succession of hot linseed-meal poultices.

June 28th.—The pain in the joints, although diminished in the wrists, had become intensified elsewhere, both knees and one ankle being somewhat swollen. Since the 26th the mustard leaves had been reapplied to the chest as frequently as the patient could bear them.

29th.—On being raised up in bed the patient fainted. The pulse still remained 100, but was very soft and compressible. A freshly prepared infusion of digitalis was ordered, together with certain fixed quantities of nourishment and stimulants at frequent intervals.

30th.—The faintness still continued; other symptoms remained the same.

July 1st.—The same symptoms. Temperature at 7 P.M. 103°. At night she began to ramble in her speech. Cold water cloths were kept constantly applied to her head.

2nd.—Rambling continued. Ice to the head.

3rd.—The rambling had turned to loud delirium, the carotids beating fiercely. The temperature at 4·30 P.M. being found to reach 105·7°, the wet pack was resorted to for the first time. A sheet was soaked in iced water and wrung out; the patient was then enveloped in it from head to foot for the space of half an hour, at the end of which period the thermometer showed an abatement of the temperature to 104°, and so far from appearing exhausted by the process the patient appeared considerably improved; the pulse, though still 100, being firmer, while the violent excitement had given way to a comparatively sound sleep. At 11 o'clock the same evening these good effects had passed off, but the temperature still continued at 104°. The wet pack was applied for the second time in the same way as before, with the result of a descent in temperature to 102° and a tolerably quiet night.

4th.—At 10 A.M. the temperature had again risen to 104·5°, and the patient still continued to ramble. After another half hour in the wet pack, the temperature went down to 101·8°; pulse 100; respiration 28. At 11 P.M. I was hastily sent for. The woman appeared to be sinking and almost unconscious; the pulse was very rapid and weak; the temperature was 104·2°. So great was the bodily prostration that I feared to have her lifted from the bed to the couch upon which the wet sheet had been spread, therefore, as an alternative plan, a large bath towel wrung out of iced water was tucked around her as far as possible without disturbing her. Stimulants and beef-tea were constantly administered. At the end of five minutes the towel was changed for a freshly-iced one, and in five minutes more a third was applied, the whole process thus occupying the space of a quarter of an hour, with the result of a descent in temperature to 103·4°, and a pulse much firmer and slower.

5th.—At 2 A.M. the bath towels were again applied as before to the front of the body, reducing the temperature to 102°. At 4 A.M. the process was repeated, but without observation as to the temperature. The patient was afterwards sponged over slowly with iced water from head to foot at intervals of an hour until 11 A.M., and by this means the temperature was maintained at 102°. The pulse (102) at this time was very much firmer, and the patient appeared calmer and more collected than she had been during the previous five days. The ice to the head was discontinued. The sponging was renewed for a quarter of an hour at 7 P.M., and also at 11.45 P.M., at which time the temperature was found to be 101·4°.

6th.—At 9 A.M. the patient, though still suffering considerable pain in some of her joints, was perfectly composed, and the marked depression from which she had previously suffered had passed off. Her pulse was 92; the temperature 100·4°.

Since the last date she gradually but slowly returned to comparative health, with but one slight relapse of the affection of the joints, unaccompanied by any great increase of temperature. The period of convalescence was naturally prolonged by the existence of the valvular disease of the heart, and by a very severe bedsore, but at the present

time she is well enough to perform all the ordinary duties of her station.

In this brief record of (what was to me) a most interesting case, I have designedly omitted many details, as not bearing directly upon the object I have had in view in reporting it. It is evident that the application of cold to the body in cases where the temperature of the blood rises to a pitch at which it imperils the action of the heart (threatens its paralysis in fact), is as justifiable a course in rheumatic fever as in any other.

Old Trafford, Manchester.

TWO CASES OF THORACIC ANEURISM.

BY FREDERICK ENSOR, M.R.C.S.,
SURGEON TO THE PROVINCIAL HOSPITAL, PORT ELIZABETH, SOUTH AFRICA.

To the physician who is alive to the insidious nature of thoracic aneurism, no cases cause more anxiety than those which exhibit symptoms of this grave organic lesion. I imagine in every hospital of seaport towns "cases" from the shipping are admitted which often puzzle the keenest and most painstaking observer. Men who are dissatisfied with their ship or captain, or who are attracted by diamond-fields or stories from gold-fields, will try every ruse to keep in hospital, but directly the vessel is out of sight their recovery is marvellously quick. When a man tells the usual tale of having pains here and there, and at the same time his pulse and temperature are fairly normal, or perhaps the former a little quickened by his "intent to deceive," and there be no marked symptoms of rheumatism, or expression of malaria or syphilis, you cannot but suspect him of malingering; and yet he may be the subject of grave internal mischief, causing immediate danger to life. I always like to give a man the benefit of the doubt, and watch and wait for a few days rather than act on a diagnosis which one may have cause to regret.

From manuscript notes of a clinical lecture on a case of aneurism of the aorta, by Dr. Todd, in 1855, I copy the following: "When patients above the age of thirty come to consult you about pains extending over the shoulders and chest, an aneurism should always be suspected." All King's men who had the good fortune to study disease at the bedside under that master in diagnosis, Dr. Todd, will coincide with me that it was a privilege and a treat to see him grapple with a difficult case of heart disease or aneurism: the repeated careful examination; the appreciation of, to us students, trifling symptoms; the patient watching of the man as he perhaps sat on his bedside; and the feeling that the *vim*, or vital force, or mind, as his disciple, Dr. Beale, would say, was stirring the depth and breadth of his "cerebral bioplasm," as it strove to solve the "enigma of life" in question, had a good effect on the class, and I dare say has made not a few strive to follow in the steps of so great a teacher.

The aid to diagnosis, which I quote from the clinical lecture, has been well illustrated in two cases which have come under my observation in this hospital; one occurred some two years ago, the other a few days since. As necessity of care in diagnosis is the only point I wish to lay stress on in these cases, I will not enter into much detail.

The first case was that of a sailor—I write from memory. He was a tall man, rather thin, aged about forty, and was admitted complaining of pain, not very severe, of a neuralgic character, in the spine and about the chest. The captain "thought he was scheming." He had been under medical treatment for same symptoms; no diagnosis had been distinctly given; he was suspected of trying to get rid of his ship.

I examined him several times and got at no positive symptoms to guide me, and yet there was something in his look which told of suffering, and made one feel that the man's pains were not imaginary. He had been in hospital about a week when I detected a prolonged sound, not amounting to a "bruit," at the back, between the shoulders. I gave a guarded diagnosis of aneurism of the thoracic aorta. A few days after, in the act of lighting his pipe, he fell dead at his bedside, and the post-mortem examination disclosed a circumscribed aneurism of the descending aorta, which, having eroded two or three of the vertebræ, had given way and filled the left pleura with blood. When men are admitted who, without a doubt, are "sea lawyers," I generally order a few doses of sulphate of magnesia, flavoured with tincture of assafœtida, and I find that they soon ask permission to leave the house. In the post-mortem room I felt glad I had not ordered the "stimulant mixture," as we term it, in the above case.

The second case, which occurred a few days ago, was the following:—A tall, thin, big-boned man, formerly a private in the German Legion, was admitted complaining of pain lancinating in the line of the intercostal nerves and lower part of the chest. No murmur at base or apex of the heart. Pulse even in both radials; no dulness over the middle of the sternum; no marked dyspnœa. The only thing I could detect was a limited dulness about the middle of the left lung, with rather harsh respiratory sounds; no cough or expectoration; pulse and temperature normal. The man was, nevertheless, conscious of something serious the matter with him; his eyes were particularly bright, the sclerotic pearly and clear.

At first I thought he was a dyspeptic "loafer" trying to remain in hospital. A thought of tubercle being laid down crossed my mind, but the pulse and temperature were against this idea. I remarked to the house-surgeon, "that it was not improbable we should find an aneurism in this case." After a careful examination, I could come to no conclusion, refused to commit myself to a diagnosis, and simply ordered him to remain in bed. No medicine was prescribed.

Two days after this, while engaged in an operation for crushed foot, the nurse entered the room, saying the German was "in a fit," as she called it. As soon as the operation was completed, on proceeding to the ward, I saw the poor fellow lying in bed, quite dead, with extreme pallor on his face. He had evidently died in a faint. The following day a post-mortem examination revealed an aneurism about the size of a turkey's egg in the descending aorta, which had eroded the seventh and eighth vertebræ, and had burst, filling the pleura with blood. The heart was small, and thin and pale in its muscular structure. The aortic valves were somewhat thickened, but not incomplete; the mitral valve was also thickened a little, but, I imagine, had been equal to its office, or we should have had more dyspnœa. Both lungs were hypermmic, the left slightly consolidated at its contact with the aneurism.

These two cases illustrate well how cautious one should be in coming to a conclusion in a case. A harsh judgment, a wrong diagnosis followed by harmful treatment, would always be a matter of extreme regret to the physician, and, in some cases, might give rise to much social distress. Better that a scheming patient should impose on his doctor for a few days than that a poor fellow with thoracic aneurism should be hurried to his end by active treatment on a wrong diagnosis.

In Trousseau's "Clinical Medicine," vol. i., p. 597, is a case well illustrating the point I wish to impress in these few remarks.

CASE OF DIABETES MELLITUS OR GLYCOHÆMIA.

BY SURGEON JOHN C. LUCAS,
H.M. BOMBAY ARMY, IN MEDICAL CHARGE H.M. 18TH REGIMENT, N.I., CAMP DEESA.

PRIVATE PUNCHUM LALLA, aged forty; service twenty years; married, but no family. The patient, a man of average height and fair intelligence, says that he enjoyed excellent health until about eighteen months ago, when, serving with the regiment at Rajcote, after repeated attacks of fever and ague, he observed that he began to pass large quantities of urine, and that the calls to micturition had been increasing in frequency, and also thirst had been in proportion excessive. His appetite has been gradually augmenting, and now he describes it to be ravenous. He has been rapidly losing flesh; from being a strong, muscular man, he is reduced almost to a skeleton. He complains of dimness of vision and near-sightedness, which he says have been steadily advancing. He admits having contracted a

syphilitic sore on the genitals about sixteen years ago, and which was followed by laryngeal and cutaneous symptoms of constitutional syphilis. Habits temperate; does not remember any severe injury to the head. No information can be derived in regard to his hereditary history.

Present condition.—August 26th, 1875: Patient is greatly emaciated, with spare flabby muscles, height 5 ft. 5½ in.; weight, without clothing and on empty stomach, 84 lb. Aspect anæmic; expression of face anxious and careworn; appearance of the eyelids not unlike that of a myopic individual. Skin very dry, and feels like parchment, and indicating want of action of the sudoriparous, but not of the sebaceous follicles, as there is a shining or glistening aspect of the skin. Temperature at the axilla 96·8°. On the scrotum and penis there are cicatrices of syphilitic ulcers. There is some slight hyperæsthesia all over the body. Physical examination of the chest elicits nothing abnormal with regard to these, though the action of the heart is, of course, feeble; pulse in the sitting posture 74 per minute, small, and somewhat hard. Complains of some uneasiness (but not actual pain) in the lumbar region; quantity of urine passed in twenty-four hours 130 ounces, of faintly acid reaction, specific gravity 1040; the usual tests show abundance of sugar. Testes small and atrophied, and there is want of sexual desire. Mouth and fauces dry; tongue pale and furred; thirst intense; appetite large; bowels irregular; no pain or vomiting after food. Hepatic and splenic dulness normal. Memory to a certain extent failing; sleep disturbed by dreams; sometimes has shooting pains in different parts of the body. The ophthalmoscopic examination points to some atrophy of the left optic disc; direct illumination (without the object lens) proves the myopia.

The treatment ordered was dietetic. Mutton 2 lb, made into broth, flour bread 1 lb., milk one pint, brown sugar ½ lb., and four eggs. He was also to take two drachms of cod-liver oil and two grains of sulphate of iron twice a day; and advised to take drinks acidulated with dilute sulphuric acid and refrain from taking water as much as possible.

Progress of Case.

Date.	Amount of fluid taken in 24 hours.	Amount of urine passed in 24 hours.	Specific gravity.
Aug. 27th	80 oz.	130 oz.	1030
„ 28th	80 „	120 „	1032
„ 29th	80 „	130 „	1031
„ 30th	70 „	120 „	1030
„ 31st	70 „	140 „	1030
Sept. 1st	70 „	140 „	1030
„ 2nd	70 „	130 „	1030
„ 3rd	80 „	148 „	1025
„ 4th	80 „	96 „	1038
„ 5th	85 „	85 „	1040
„ 6th	85 „	135 „	1030
„ 7th	85 „	96 „	1041
„ 8th	85 „	120 „	1020
„ 9th	80 „	120 „	1020
„ 10th	85 „	116 „	1030
„ 11th	82 „	118 „	1027
„ 12th	85 „	126 „	1030
„ 13th	85 „	120 „	1028
„ 14th	84 „	117 „	1032
„ 15th	70 „	108 „	1020
„ 16th	64 „	130 „	1030
„ 17th	64 „	120 „	1025
„ 18th	60 „	113 „	1030
„ 19th	64 „	130 „	1020
„ 20th	60 „	120 „	1029
„ 21st	60 „	120 „	1028
„ 22nd	60 „	120 „	1029
„ 23rd	60 „	120 „	1028
„ 24th	60 „	120 „	1029
„ 25th	60 „	130 „	1030
„ 26th	60 „	130 „	1029
„ 27th	60 „	126 „	1030
„ 28th	60 „	120 „	1029
„ 29th	60 „	120 „	1028
„ 30th	60 „	120 „	1029

With 14 oz. of skim-milk.

* In addition, diaphoretic treatment.

Remarks.—The treatment resorted to in this case has been considerably varied. Both sugar and starch were for a time allowed and withheld. The favourite remedies, opium and creasote, were in their turn tried, but had no decisive effect on the polyuria, as will be seen from the above columns. On Sept. 8th the saccharine and starchy constituents in the diet were altogether omitted, and, in addition to the cod-liver oil and iron, three minims of creasote, with a grain of opium, in pill, were ordered; then on the 16th these latter drugs were stopped, and the patient was allowed as much skim milk as he could take. Lastly, on the 24th I resolved to act upon the skin, and therefore the patient was ordered a warm bath daily, and half a grain of ipecacuanha, with a grain of opium, twice a day.

From this case it will be seen that the sugar in the diet did not produce any ill-consequences, and as far as this case is concerned the skim-milk plan of Dr. Donkin of Durham did not prove of much avail. During the above period the urine always continued saccharine, and the specific gravity fluctuated with the dilution—i.e., when the total quantity was less, the specific gravity rose in a corresponding ratio, and *vice versâ*. I believe the actual quantity of sugar excreted in a fixed number of hours remained much about the same.

The man continued losing weight (on an average from a pound and a half to two pounds weekly), but as yet there is no evidence of deposition of tubercle in the lungs, so that the patient will in all probability sink from asthenia rather than supervention of phthisis.

At the "invaliding," which is shortly to take place, the man will be recommended to take his discharge, and as he will leave the station for his native place, there will, unfortunately, be no opportunity afforded to learn the further progress of his case, or an autopsy in the event of a fatal issue.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

LARGE HYDATID TUMOUR OF LIVER AND RIGHT PLEURA; PUNCTURE, FOLLOWED BY COLLAPSE, PERITONITIS, AND SUPPURATION WITHIN THE MOTHER CYST; FREE OPENING, PERMITTING DISCHARGE OF NUMEROUS HYDATID CYSTS FROM TIME TO TIME; PLEURO-PNEUMONIA OF RIGHT SIDE; DEATH; AUTOPSY.

(Under the care of Dr. ANDREW.)

FOR the following notes we are indebted to Vincent Harris, M.B. Lond., house-physician.

Ellen M——, aged thirty-nine years, an itinerant fruit-vendor, was admitted into Mary ward on Sept. 3rd, 1875. She stated that she had always been healthy and strong up to her last confinement five years ago, since which time occasional pains in the right side had somewhat troubled her, but she had been able to do her work fairly. About twelve months before admission she had noticed that there was a swelling rather high up on the right side of her abdomen, and that it had gradually increased. During the past four or five months the pains in the side had become more severe, sometimes enforcing entire cessation from work. Had never been jaundiced.

On admission, the patient was healthy-looking and fairly nourished; complexion sunburnt; conjunctivæ and skin not jaundiced; functions natural; pulse 80. No abnormal pulmonary or cardiac signs. The lower part of the right side of the chest and upper part of the corresponding side of the abdomen were decidedly bulged. The swelling was rather tender on palpation, and presented in its lower part well-marked fluctuation. The liver dulness began about an inch

below the right nipple, extending downwards, in the nipple line, to near the level of the umbilicus,—across, on a slightly higher level, to the left hypochondrium and to the right, and backwards to a proportional extent. The surface, as far as could be made out, was smooth, but presented one or two slight irregularities. The urine was light-coloured and acid, of specific gravity 1008, and contained no albumen. The catamenia had been absent for several months. Family history of consumption, but none of tumour.

An hydatid tumour of the liver having been diagnosed, it was decided that it should be tapped after the patient had been put in as good a state of health as possible by rest in bed. Accordingly on Sept. 11th a puncture was made, and about an ounce of fluid was with difficulty withdrawn with an aspirator. The fluid was glairy and gelatinous, containing, as far as could be discovered, no hooklets or striated membrane.

On Sept. 13th the note is —"Since the operation the patient has been greatly collapsed, and her nails, nose, and lips are singularly blue. Complains of some pain in her right side at the seat of the puncture, and some tenderness also. The tongue is rather furred on the dorsum. Pulse 108; temperature 99·2°."

For the next few days the patient showed signs of severe peritonitis. Her pulse and temperature rose, her tongue became brown and dry, and the abdomen grew very tender. She lay constantly on her back, with her knees drawn up. Her bowels were very constipated.

On the 16th and 18th she had severe rigors, which were followed on the latter occasion by jaundice, and from the marked evening rise in the temperature, with other symptoms of hectic which followed, suppuration in the hydatid cyst was feared. The jaundice increased for a few days, the urine becoming very dark, of sp. gr. 1022, acid, and containing bile, but no albumen. The pain in the tumour increasing, and the hectic continuing, a large trocar and canula were used on the 23rd to puncture the sac. The fluid which exuded being too gelatinous to pass through the attached tube, the instrument was withdrawn, and dressing forceps were inserted into a free opening previously made. By this means about two or three ounces of glairy, and more or less purulent, fluid were evacuated, and a thick-walled hydatid cyst was removed.

After the operation, as soon as the collapse (which was abnormally severe) had subsided, the patient did fairly well for some time. On Sept. 29th there was a large discharge from the wound (still kept freely open), consisting of a great number of hydatids of all sizes, some whole, but most of them collapsed, of gelatinous fluid and pus. During the next fortnight cysts came away on about eight or nine occasions, and the external swelling decreased in size. On Oct. 8th the patient complained much of cough, and by physical examination the base of the right lung was found to be dull on percussion, with crepitation and rough breathing above the area of dulness. The sputum was pneumonic.

From this time the lung symptoms increased in severity, the patient became more and more cyanotic, and died on Oct. 19th, having been light-headed during the two preceding nights.

There were several discharges of hydatid cysts during the ten days before death. In all it is calculated that fully a hundred cysts were discharged through the opening in the side. The temperature during the whole course of the disease, after the first tapping, was always above normal; it varied from 100° to 103° F., being invariably raised in the evening. The pulse corresponded closely with the temperature. Jaundice appeared on Sept. 19th, as mentioned above, and continued throughout the remainder of the case.

The treatment consisted in perfect rest, light food easy of digestion, and, in the way of drugs, opium to allay pain, to keep the bowels quiet, and to procure sleep, an occasional castor-oil injection being used to relieve the bowels.

Autopsy.—On opening the chest and abdomen the liver was seen to be pushed over to the left side, while in the place of the greater part of its right lobe there was a huge, thick-walled sac, containing fluid. This sac communicated with an hydatid cyst in the right pleural cavity at its back and upper part. The communication was a small hole in diaphragm. Thus, from the second rib to below the umbilicus (as the cyst extended downwards to this point) there was a huge sac containing hydatid cysts, with about four quarts of fluid. The hydatid of the pleura had penetrated for a short distance at one point into the substance of the lung. The lung was collapsed except near the part penetrated, where it was solidified, with a granular appearance on section. The left lung was normal. The heart was not diseased or displaced. The left lobe of the liver was about the size of an ordinary right lobe; the right was about three or four inches broad transversely, and then seemed to spread out as a thin layer of liver substance, soon altogether disappearing on the anterior surface of the hydatid. Gall bladder normal. The liver substance was pale, with rounded edge and amyloid reaction. The spleen was slightly enlarged and amyloid. The peritoneum about the cyst was thickened at the seat of old adhesions, and there was also recent lymph about it. The surface of the left kidney was smooth, with one scar like that of an old infarct; otherwise normal. The right was adherent to under surface of cyst of liver, granular and tough. Cortical substance diminished. Several small cysts on surface. Intestines and mesenteric glands natural.

WEST LONDON HOSPITAL.

TWO CASES OF INTERNAL URETHROTOMY FOR NARROW, NON-DILATABLE STRICTURES; GOOD RESULTS.

(Under the care of Mr. TEEVAN.)

THE following cases are interesting as showing the efficiency of the operation, the slight annoyance it occasions, and the brief confinement it necessitates.

CASE 1.—George G——, a healthy-looking sailor, aged thirty, was admitted into the hospital on Nov. 2nd. The patient stated that six years ago he suffered from a gonorrhœa, for which he was treated with medicines and injections. The complaint degenerated into a gleet, which hung about him for a long time. A year ago he had an attack of retention, which he overcame by hot gin-and-water and severe straining. Three months ago, when at New York, he had another attack, and the surgeon whose advice he sought was not able to pass a catheter till he had anæsthetised him. When he applied to Mr. Teevan six weeks ago he complained of frequent and difficult micturition, and the annoyance of having his "pants" always wet from the dribbling of urine. Examination detected the existence of a tough stricture three-quarters of an inch long, four inches from the meatus externus. There were also three ring strictures of large calibre in the penile urethra. Gradual and continuous dilatation were both fairly tried, but the deep stricture could only be enlarged sufficiently to admit of the passage of a small catheter, and as it was desirable that the patient should be able to introduce a full-sized instrument for himself, he being a sailor, an operation was indicated. Accordingly, on Nov. 2nd, at 3 o'clock P.M., Mr. Teevan passed a catheter staff, and, having proved its position by withdrawing some urine through it, divided the stricture internally from before backwards. Only a few drops of blood were lost; a large metal catheter was introduced, and the water drawn off quite clear, to demonstrate that the calibre of the urethra was re-established, and that there was no hæmorrhage into the bladder. At 10 A.M. the next morning Mr. Noot, the house-surgeon, found the patient had slept well, and that his tongue was clean and moist, and the skin cool. The pulse was 78, and temperature 98·4° F. Micturition was attended with much smarting. On Nov. 5th the patient was up and walking about the ward; the soreness was nearly all gone. No. 20 (Charrière) metal catheter was passed; on the 6th, No. 22 olivary metal bougie; on the 8th, No. 22 conical elastic bougie; and on the 10th, No. 20 silver catheter. The patient left the hospital the same day quite well in all respects. He has since learned to pass a full-sized elastic bougie with ease for himself.

CASE 2.—Robert P——, a thin and rather haggard-looking labourer, aged thirty, applied as an out-patient on Oct. 9th. He stated that he had never had gonorrhœa, gleet, or syphilis; but that fifteen years ago he was rolled over and kicked in a scuffle, and that his urine ran away from him. For the last ten years he has passed a very bad stream of urine, and a year ago was attacked with retention, for which he went to St. Thomas's Hospital. No instrument could be

introduced, but he was relieved by a hot bath. At the present time the patient is troubled with difficult micturition, accompanied by much straining. Examination detected a very tough thick stricture, half an inch long, three and a half inches from the meatus externus. Gradual dilatation was tried, but no progress was made, and only the smallest elastic catheter could be introduced. On the 2nd of November the patient entered the hospital, and at 3.30 P.M. the same day Mr. Teevan divided the strictures, internally, from before backwards, having first demonstrated that the catheter-staff was in the bladder by withdrawing some urine through it. About a teaspoonful of blood was lost. A large metal catheter was passed, to prove that the calibre of the urethra was restored. The water which flowed through from the instrument was quite clear. At 10 o'clock the next morning Mr. Noot found the patient comfortable; tongue clean; skin cool; pulse 90; temperature 98·4°. On the 5th, No. 20 metal catheter was passed; on the 6th, No. 22 conical metal bougie; on the 8th, No. 22 conical elastic bougie; and on the 10th, No. 20 silver catheter. The patient left the hospital the same day in all respects quite well. He can now pass a full-sized elastic bougie for himself.

Mr. Teevan observed that he considered no operation upon a passable stricture justifiable unless milder measures had been tried and found wanting. In the cases under notice, dilatation had been employed without success, because the strictures were so tough as to be incapable of being dilated beyond allowing a small catheter to pass. An operation was therefore indicated, and he had selected internal urethrotomy as most appropriate for these particular cases. The great point in the operation was to prove, before cutting, that the catheter-staff or guide had really been passed into the bladder, which he had done by withdrawing urine through it. Provided this, the one thing needful, were done, it mattered but little whether the stricture was divided from before backwards or *vice versâ*. Some surgeons had an objection to the division from before backwards, but the objection could not be maintained, and had arisen from the fact that formerly the division from before backwards had been performed without demonstrating that the instrument was really in the urethra. Hence it was that mistakes had arisen from the urethrotome having been passed into a false passage or the rectum, and thus it was that the principle of division from before backwards had been saddled with the errors of a faulty execution, which really formed no part of the operation. In internal urethrotomy the prostate and neck of the bladder were not touched. This was a most important point, for whatever hæmorrhage ensued it must make its exit at the external meatus, as it could not gravitate backwards into the bladder, its neck being firmly closed. If a blood-clot formed in the bladder a stone might result. Now, this could not occur in internal urethrotomy, but it might do so when a stricture was forcibly dilated, for Civiale had pointed out that in that operation the neck of the bladder might be injured, and allow of hæmorrhage into the organ, and he had been informed of a case where, after the operation of immediate dilatation, a stone had formed on a blood-clot. Of all operations for stricture internal urethrotomy was attended with the least risk. Its twin sister—subcutaneous section—excelled it so far as regards the certainty of ensuring a thorough division of a stricture, but it was not always applicable.

DORSET COUNTY HOSPITAL.

EXTENSIVE INCISED WOUND THROUGH THE CALF OF THE LEG; IMPORTANT AND SATISFACTORY USE OF THE CARBOLISED CATGUT SUTURES.

(Under the care of Mr. JOHN TUDOR.)

B. P——, labourer, aged twenty-three, was admitted into the hospital late on the night of August 23rd, 1875, with a semilunar incised wound through the calf of the leg, about ten or eleven inches in length, the course of the wound being in a direction from below upwards, having very much the appearance of a posterior flap in an ordinary amputation. The soleus and gastrocnemius muscles were cut through, and part of the flexor longus pollicis. The accident occurred in the harvest-field, owing to the man running across a scythe whilst chasing a rabbit at full speed.

In consequence of the upward course of the wound, no important vessels were injured. One which bled rather freely was ligatured, and another twisted. The chief difficulty presenting itself was the retraction of the muscles, even to the extent of several inches when the knee was fully flexed, rendering it impossible to secure them in the same sutures as the skin. Taking this into consideration, the muscles were separately brought together by means of carbolised catgut. The sutures were passed, about an inch from their margins, through the entire thickness of the muscles, and tightly secured, thus bringing the opposed surfaces together firmly. Their ends were then cut short off.

The skin was brought together by twelve silver wires; the wound was covered with carbolised oil, lint, and tow; the knee was flexed and secured by a bandage passed over the foot and made fast to a belt around the waist, the limb being then raised and placed upon pillows, resting on its outside. The progress of the case was very satisfactory, the wound healing chiefly by first intention. At the end of three weeks the patient was convalescent and able to walk quite comfortably, and was discharged Sept. 23rd, a month after his admission.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

AT the ordinary meeting of this Society, on the 26th ult., the chair was taken by the President, Sir William Jenner, Bart. The chief feature of the evening was a case of acute cancer of the liver, with pyrexia, related by Dr. Murchison, which led to an interesting although somewhat desultory discussion, commencing with the question of pyrexia in cancer and terminating with that of dropsy from venous obstruction. Mr. Lawson showed two interesting cases in which he had removed tumours from the orbit.

Dr. MURCHISON read notes of two fatal cases of Acute Pyelitis and Nephritis, apparently consequent on Gonorrhœa. These cases occurred several years ago at the London Fever Hospital, and illustrated a mode of fatal termination of gonorrhœa which, although tacitly acknowledged as probable, had yet been but seldom recorded. In "Chelius's System of Surgery" it is stated that John Hunter was of opinion that the irritation of gonorrhœa was sometimes propagated to the kidneys, but beyond that statement Dr. Murchison had been unable to find any records of such cases. Dr. G. Johnson had informed him that he had either met with or read of such a termination of gonorrhœa. The first case was that of a grocer's assistant, twenty-eight years of age, who was admitted into the Fever Hospital on June 4th, 1865, in a state of profound coma, with low muttering delirium and a dry, brown tongue. There was no eruption; the temperature was not taken, and no urine could be obtained. There were moist sounds at the back of each lung. The man died three hours after admission, and after his death it was learnt that he had been for some time suffering from gonorrhœa, the cerebral symptoms being of only two days' duration. On post-mortem examination the entire length of the urinary tract was intensely inflamed and bathed in pus, that in the ureters being thick and yellow; and both kidneys were deeply engorged, in the first stage of acute nephritis. There was no old renal disease and no dropsy. There was incipient lobular pneumonia in the lower lobes of the lungs, which were much congested. The brain was not examined. The second case was that of a lady's maid twenty-five years of age, who was admitted into the same hospital on Jan. 31st, 1866, in a state of unconsciousness, with dusky face and laboured breathing. There was convergent strabismus, a well-marked cerebral macula; no rash. There is no record of the pulse or tempera-

ture in this case. There was hypostatic congestion of the lungs, and the patient died on Feb. 2nd, never having regained consciousness. Death was preceded by two convulsive seizures. After death it was learnt that she had been apparently well up to the day before admission, when she had travelled from Paris to London. Arriving in London, she made a good meal, and was subsequently attacked with convulsions, and then brought to the hospital in a state of coma. There was found hyperæmia of the membranes and substance of the brain; no tubercle in the lungs, which were congested; the kidneys were large, smooth, and almost black from the large amount of blood they contained; the ureters and bladder contained a large quantity of pus, and the whole genito-urinary tract was intensely injected.—Dr. GREENHOW said that he was reminded of a somewhat similar case which he saw when he was a student at Edinburgh. He was present at the post-mortem examination of a man who had died in a state of coma of thirty-six hours' duration. He was supposed to have been poisoned, but he was the subject of gonorrhœa, for which he had been taking copaiba and using injections. Sir William Newbiggin at the time attributed the symptoms to "cerebral metastasis" from gonorrhœa checked by treatment.—Sir WILLIAM JENNER asked if it was quite certain that the female patient had gonorrhœa.—Dr. MURCHISON replied that there was no history to be obtained on this point, but the post-mortem appearances in her case were similar to those in the male patient. In answer to Mr. B. Hill, he also stated that the duration of the gonorrhœa in the male patient was not defined; it had existed for some time. He further stated, in reply to a question put to him by Sir William Jenner, that the man had been under treatment for gonorrhœa, and he could not say that he had taken cantharides. Opposed to the view of the inflammation of the kidney being primary was the fact of the distension of the passages with pus, the ureters appearing as thick cords. Although such extension of inflammation was commonly stated in text-books, he had never come across any others.—Sir WILLIAM JENNER thought the interest lay in the extension of the inflammatory mischief to the finer structures. Such cases must be rare, else among the many surgeons present there must have been some who had met with them.

Dr. MURCHISON then read notes of a case of Acute Cancer of the Liver, with Pyrexia, in a man aged twenty-four, which, he said, illustrated a clinical fact of some importance—namely, that the temperature in certain cases of cancer may be elevated. Not much is known as to the range of temperature in cancer. Wunderlich says a high temperature in such cases is usually dependent on complications; a statement confirmed by Dr. Woodman, who adds that the rise of temperature in cancer is rarely above normal limits. The patient was a carpenter, who, six months before his admission (Nov. 6th) into hospital, strained himself, and attributed to this strain a swelling with tenderness of the left testicle. There was no history of malignant disease in his family. Six weeks before admission he began to have pain in the right side of the abdomen, and some enlargement of the liver began to be noticed. This enlargement progressed rapidly, without any rigors, but with profuse night-sweats and much emaciation. On admission, the temperature was 101·3°. He complained of pain in the hepatic region, which was bulged, the liver itself reaching as low as the pelvic brim, and, above, its percussion-limit was about an inch and a half above the nipple. The surface of the liver was smooth, tense, and tender. There was slight jaundice; no ascites. Specific gravity of urine 1018; contained a trace of albumen. There was slight cough. A little sibilus audible over both lungs at back. Pulse 120. The left testicle was twice the size of the right; hard, but not tender. The liver continued to enlarge; he had frequent attacks of vomiting; the jaundice increased; and death took place after several days' delirium, and on one occasion a decided rigor followed by heat and dry skin. The complete record of the temperature was unfortunately lost; but Dr. Murchison gave the following figures on the first few days of observation:—Nov. 6th: Evening, 101·2°. 7th: Morning, 101·1°; evening, 103°. 8th: Morning, 99°; evening, 101·4°. 9th: Morning, 98·5°; evening, 101·2°. 10th: Morning, 99°; evening, 100°. 11th: Morning, 100°; evening, 103°. The liver was found to be greatly enlarged, measuring 12½ inches vertically; and its entire substance was studded with masses of vascular cancer, varying in size from that of pea to that of a chesnut, not softened, but exuding a milky juice filled with large nucleated cells. There was no recent peritonitis, and no inflammatory change in the liver-tissue that remained. A chain of cancerous glands passed up the abdomen in the region of the left kidney; and the left testicle was also infiltrated with cancer. Both lungs presented similar masses of new growth; but there was no sign of recent inflammation in them. The heart was healthy. The case was an obscure one on account of the high temperature, the age of the patient, the history of previous injury to the testicle, supervention of the cerebral symptoms, and of a rigor shortly before death. The diagnosis was that the case was one of pyæmic inflammation of the liver; and the case was of interest in showing how closely a rapidly evolving cancer without any inflammation could simulate pyæmia.—Sir WILLIAM JENNER asked whether the hepatic tissue between the masses of cancer showed any evidence of inflammation.—Dr. MURCHISON replied that it was injected, but showed no inflammatory exudation or pyæmic deposit. It had been carefully examined with the microscope. In answer to Dr. Southey he said the testicle was cancerous, and pointed out that it was curious that although that organ was the first affected, the disease had remained stationary there, spreading up by the lumbar and retro-peritoneal glands to the liver.—Dr. MOXON inquired whether the portal veins had been examined. He referred to a case which he had published in the *Medical Times and Gazette* for 1873 (vol. i.) It was the case of a gentleman, twenty-six years of age, who had during life symptoms resembling suppuration of the liver, the temperature rising several times to 102·5°, with rigors and night-sweats. After death the liver was invaded with cancer, and the branches of the portal vein were stuffed with masses of cancer. The liver-tissue between the cancer nodules was swollen and pinkish. He compared it at the time to the union of chlorine and hydrogen as producing heat similar to the union of oxygen and hydrogen, believing simply that pyrexia was an acute phenomenon produced by changes different in kind but equally rapid in progress.—Dr. MURCHISON replied that there was nothing observed in the larger veins.—Dr. SOUTHEY had met with a similar case in which the portal vein was invaded. He thought that in all rapidly growing cancers the chemical changes produced must be varied, and give rise to pyrexia.—Dr. MURCHISON inquired whether there was any ascites present in the cases mentioned by Drs. Moxon and Southey. No doubt pyrexia might be expected to occur in rapidly spreading cancer, but it had not been so recorded.—Sir WILLIAM JENNER said that in one of the most rapid cases of cancer he had witnessed, that of a boy, who died a fortnight after the appearance of a tumour in the abdomen, there was no marked elevation of temperature. The cancer was disseminated throughout the pleura and peritoneum, infiltrating the intestinal walls.—Dr. MOXON said there was no ascites present in his case, although the portal vein was so obstructed, but he was not sure whether venous obstruction always led to dropsy. Thus in a case which he brought before the Pathological Society, in which the coronary sinus was entirely closed by a hydatid tumour, the blood finding its way into the auricle by dilated Thebesian foramina; there was no hydro-pericardium. Another case which he brought before the same Society presented complete obliteration of the sinuses of the dura mater by inflammatory growth without there being any effusion. He had seen several cases of uterine cancer in which the veins of the lower limbs were completely plugged without any œdema of the feet.—Mr. BRUDENELL CARTER referred to a case brought before the Clinical Society last session by Mr. Hutchinson, in which there was obliteration of the ophthalmic vein without any swelling of the optic disc.—Mr. CALLENDER asked Dr. Moxon how much of the coronary sinus and in what part of its course was it obliterated?—Dr. MOXON replied that the obliteration took place about one inch from the auricle.—Sir WILLIAM JENNER said that if the blood were prevented flowing in one direction it must find an outlet somewhere.—Dr. MOXON wished to draw attention to the fact that there does occur blocking of the veins, as the portal, without there being dropsy; so that absence of ascites was no evidence against implication of the portal vein.

Mr. BERKELEY HILL made a few remarks on a case of Amputation at the Hip-joint for Fibro-plastic Tumour. The

tumour, which was shown at the Pathological Society by Mr. Godlee, involved the whole femur and the femoral vessels. This necessitated making the anterior flap wholly of skin. The flap sloughed, and the patient made a slow recovery, many hundreds of skin-grafts being employed to cover the large granulating surface. The operation was performed on August 12th, and he brought the patient to show the result of the operation. The growth was a round-celled sarcoma.—Mr. CALLENDER remarked that since the introduction of the abdominal tourniquet the old method of performing amputation at the hip by transfixion had fallen into disuse. The plan he preferred was to form an anterior flap, and then to divide the femoral vessels by a clean vertical incision, by which the danger of splitting them was avoided. When this was done, and care taken in making the flap to preserve the branches supplying it, no sloughing followed. He wished to know the *rationale* of the employment of so many grafts in the present case.—Mr. HILL replied that the size and extent of the tumour had obliged him to make the flap by dissecting off the skin from the surface of the tumour; and no doubt he had cut through the branches referred to. He was sure more than a hundred grafts had been used; but when it was remembered what a large surface there was to be covered, including the acetabulum, and that the grafts were made on many occasions, this number was not surprising. The cicatrix obtained was very supple, and proved that many of the grafts had taken.

Mr. GEO. LAWSON exhibited two patients from each of whom he had removed a Tumour of the Orbit. They were essentially different, but each presented points of great clinical interest. The first case was that of an elderly woman who was admitted into the Middlesex Hospital, with a large melanotic tumour involving the eye and filling up the whole orbit. This growth Mr. Lawson removed, and then applied the chloride of zinc paste, and in such a manner that he succeeded in saving the upper eyelid. One of the great disadvantages, he remarked, of the use of the chloride of zinc in such cases had been that, owing to the running of the paste into the cellular tissue of the eyelids, both lids had been destroyed by it. The plan which he now adopts, when practicable, is the following:—After the eye and tumour have been excised, pressure is made in the orbit until all bleeding has ceased. The mouth of the conjunctival bag, from which the globe has been enucleated, is now to be held open with two pairs of forceps, whilst the paste, spread on small strips of lint, is plastered round the sides of the orbit. A small piece of cotton-wool is next introduced to keep the strips of lint *in situ*, and the mouth of the conjunctival bag is closed over the whole by a single continued suture. A layer of lint is then placed over the conjunctiva, and upon this the lids are closed and kept in position with a compress of lint and a roller. The patient progressed well, had suffered no pain, and had no recurrence of the disease since she left the hospital on the 25th May. In the second patient Mr. Lawson removed a tumour from within the orbit, without inflicting any injury on the eye. The growth occupied the floor of the orbit, and seemed to spring from the periosteum, far back in the orbit. It was about the size of half a walnut, much flattened when it was pressed between the eye and the orbit, but rounded at its free external border. The specimen was examined by Dr. Coupland, who pronounced it to be a lymphoma.—Dr. MURCHISON inquired if the first case related by Mr. Lawson was a spindle-celled sarcoma. In reference to this he referred to a case (Path. Trans., vol. xxiv.) in which a spindle-celled sarcoma recurred in the liver, and led to the patient's death eleven years after removal of the primary growth from the orbit.—Mr. BRUDENELL CARTER wished to know whether Mr. Lawson advocated this method for tumours external to the eyeball as well as for intraocular growths. In one case in which he had extirpated a sarcoma of the orbit by means of caustics there was no recurrence, but an unsightly cavity was left. In this case the growth seemed to spring from the periosteum on the inner side of the orbit; and, under such conditions, he feared Mr. Lawson's plan would be inapplicable. The second case related by Mr. Lawson reminded him of a patient, nineteen years of age, in whom the right orbit was filled by a growth pushing forward the eyeball. The eyeball was enlarged, and the eyelids and eyelashes were hypertrophied. The growth was congenital, and had grown rapidly up to the third or fourth year, and then advanced but slowly. He made a long incision along the lower margin of the orbit, and removed a large growth, which was pronounced to be a degenerated nævus. The deformity was much relieved by the operation, and, with the exception of the larger size of the lids and of the eyeball, there was but little difference seen in the two orbits. Two years after the patient returned with the eye again projecting, and the operation being repeated, a similar growth was removed, on this occasion from above the globe. This operation was followed by erysipelas and suppuration, and now the eye has fully receded. Very probably Mr. Lawson would have recurrence of the growth in his case.—Mr. LAWSON, in reply, said that those cases only were fitted for treatment by means of the zinc paste in which a bag of conjunctiva could be left behind so as to receive strips of lint bearing the paste.

Mr. BRUDENELL CARTER then introduced a patient on whom he had performed his new operation of iridectomy. (See page 561.) The case was one in which the effects of the operation could be well seen, the patient having green irides. The artificial pupil was made in an external direction.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

AT a meeting held on the 22nd ult., Dr. Routh, President, in the chair, Mr. FRANCIS MASON exhibited a most interesting case of Tumour of the Palate. The patient, who was thirty-four years of age, and whose voice was not impaired, had remarked thirteen years ago a small growth on the hard palate. This increased in size, and was, previously to the man being seen by Mr. Mason, the seat of hæmorrhage, which was reproduced profusely on examination. An ulcer and cavity at the back of the tumour were discovered, and the bleeding was treated with perchloride of iron on admission into St. Thomas's Hospital. Mr. Mason said that the tumour had perceptibly diminished, and that he thought it was of a cystic character. His object in bringing the patient forward was to inquire if similar cases had been seen, as he thought this kind of tumour to be rare, and he wished to hear any suggestions as to operative interference. —Mr. ADAMS dilated on the rarity of tumours of the hard palate, but related a case of his own similar to the one brought before the Society, in which he had removed the growth with ease, though he had anticipated considerable difficulty, and he recommended removal in Mr. Mason's case, the tumour being, in his opinion, fibroid and non-malignant.

Dr. THOROWGOOD then showed the Cirrhosed Liver of a Child ten years of age, who had died after exhibiting abdominal enlargement and blood in the stools. He dwelt on the youth of the patient, and on the absence of any alcoholic stimulation.—To a question by Dr. LEARED, inquiring if the child came of intemperate parents, Dr. THOROWGOOD replied in the negative. — Mr. ADAMS and Dr. CRISP made a few remarks, the latter speaker alluding to the large quantity of spirits given to children by poor parents.

Dr. THOROWGOOD exhibited an Inhaler invented by Mr. Carrick, of Glasgow, the use of which was ably demonstrated by the inventor.

Dr. BRUNTON then read a paper "On the Rational Treatment of Common Tapeworm." After stating the varieties met with in this country, and mentioning the anomalous symptoms to which they give rise (their very anomaly, he remarked, affording a clue to the diagnosis), he stated that the chief points to be observed in the treatment were: a preliminary starvation of twenty-four hours, and the administration of a combination of kamala and male fern—namely, two drachms of kamala to be rubbed up with a little gum-and-water till an emulsion is formed, and then two drachms of oil of male fern to be added, and the whole triturated in a mortar, with a gradual addition of water till a three-ounce mixture is formed, of which half is to be given at bedtime, and the remainder four hours later. This he had never known to fail. He insisted on the quality of the drugs being good, and spoke of the after-treatment by tonics.—In the discussion which followed, Dr. FOTHERGILL said he thought the way in which drugs were administered in these

cases was an important point.—Dr. LEARED said he himself first introduced kamala into this country, which he first thought had a mechanical effect, but has since found the tincture to be as powerful as the powder.—Dr. ROGERS spoke of the inferior quality of the drugs supplied to hospitals and dispensaries.—Dr. CRISP thought turpentine in large doses to be very effective, and did not think worms were ever introduced into the system by vegetables.—Dr. COOK had used the areca nut with success combined with the male fern.—Dr. THEODORE WILLIAMS never had much trouble with these cases, and thought the worm did not affect the patient's health to any great degree.—Dr. FARQUHARSON thought the tænia mediocanellata to be more common than the tænia solium. He considered male fern to be very effective by itself, and deprecated the long starvation treatment.—Dr. GODSON mentioned the good effect of common salt in these cases.—Dr. GRIFFITH lauded the administration of large doses of iron.—After Dr. BRUNTON had responded the meeting adjourned.

At a meeting held on November 29th, Dr. Routh, President, in the chair, Dr. GRIFFITH exhibited a case of Hermaphroditism. A discussion followed on the sex of the child, in which the President, after careful examination, considered it a female, as no testes could be found; whilst Mr. SEBASTIAN WILKINSON and Dr. ROGERS thought the child to be a male; and Mr. DAVY suggested it might be of neuter gender.—Dr. CRISP mentioned a case described by Dr. Clutterbuck similar to one of Prof. Wood's referred to by Mr. S. Wilkinson, and the President appointed Dr. Wiltshire and Mr. Davy to examine the present case, with Dr. Griffith to report thereon.

Dr. CRISP then read a paper "On a Recent Epidemic of Scarlatina, Epidemic Sore-throat, and Erysipelas, which occurred chiefly in June last, in the south-west district of Chelsea," the peculiarity of which, he said, was the large number attacked almost simultaneously, and its general mildness and unfatality as regards scarlatina. A table of 98 cases seen by Dr. Crisp in June was appended, 42 being mild cases of scarlatina (of which only 7 occurred in patients above the age of twenty), and 56 of what he called epidemic sore-throat (only 6 of which were under twenty years of age). The invasion of this latter, he went on to say, was generally sudden, beginning mostly with stiffness at the back of the neck, chills and fever, with depression of power; the tonsils enlarged and inflamed, ordinarily without abrasion or creamy patch; in many cases the glands at the back of the neck were much swollen, there was no eruption or desquamation of cuticle, nor did the white tongue with red tip and raised papillæ exist. One case only, in a lady sixty years of age, proved fatal, and this was from an accidental fall against the bed-post; but in another isolated case, in which abscess formed in the leg, the tracheal obstruction and loss of voice were so formidable that tracheotomy was contemplated. The patients, as in the scarlatinal cases, were all in good circumstances, and very little of the disease, as shown by the reports of the parochial surgeons, was seen among the poorer classes. None of the cases of scarlatina were fatal; they were unusually mild and rarely attended with any kidney complication. The general state of the drains, the opening of the old sewer at the end of Beaufort-street, and the deposit of sewage upon the mud of the river (the disease being confined to an area along the river of about half a mile in length and 500 or 600 yards in breadth) were supposed to have been the chief exciting causes. Erysipelas also prevailed to a great extent; six cases of this disease were seen in infants after vaccination.—In the discussion which followed, Dr. BUCHANAN thought the method of the spread of erysipelas, sore-throat, &c., required investigation, and mentioned the propagation of erysipelas by vaccination from a subject which showed symptoms of the disease; he also alluded to the spread of scarlet fever through the cream supply, the result of which, however, was as yet inconclusive.—Dr. THEODORE WILLIAMS supported this view.—Mr. MILTON stated that scarlatina had been increasing in severity since the days of Sydenham, although the sewage works in London are more complete at the present than they were at that time. He thought the milk supply not to be the cause of the present outbreak.—Dr. FOTHERGILL, Dr. FARQUHARSON, and Mr. M'DONAGH also made a few remarks, and after Dr. CRISP had responded, the meeting adjourned.

Reviews and Notices of Books.

The Diseases of the Heart and of the Aorta. By THOMAS HAYDEN, F.K. & Q.C.P. Dublin: Fannin and Co. 1875.

THE treatise which Dr. Hayden has added to the many already existing on diseases of the heart and great vessels is one which has little to fear from rivalry or comparison. Written in a special way, it will have a special value. It outdoes all its compeers, at any rate in size. A thick volume of more than twelve hundred octavo pages is a large work on a special subject. It is, indeed, awkwardly large. Had it been compressed to half or two-thirds of its present size, it would have gained in convenience, and we are not sure that it would have lost in utility. Its size is due to its encyclopædical comprehension of all work on the subject, whether of historical or scientific interest, which sometimes is very small. The facts and statements of other writers, which are reproduced in abstract, constitute probably two-thirds of the work. They are sometimes criticised, but hardly ever digested. They are presented to the reader in equable succession, and, in spite of the many merits of Dr. Hayden's treatise, we are somewhat reminded of the Chinese method of composition of a medical book, according to which the writer invariably describes first what every preceding writer has said upon the subject, and then to the undigested series he adds his own opinion. This is very much what Dr. Hayden has done, but the collection of facts and statements is of great value, and can have been accomplished only by great industry.

The first hundred pages are devoted to the anatomy and physiology of the heart. The additions to our knowledge which have been made by successive workers, from Vesalius to Pettigrew, are detailed. Every important research on both the anatomy and action of the heart is included; the modern theories of the mode of its innervation are given at length. No less than sixteen woodcuts are introduced to illustrate the various theories concerning the time occupied by the various elements of the cardiac action. That accepted by the author is the division in common use in this country.

The mechanism of the sounds of the heart is discussed at great length, and a long table is introduced of the various causes to which the sounds have been ascribed; copied from Longet, and augmented by the author, whose own explanation, with which it closes, is the common one, with the exception that he does not allow the muscular action of the heart to enter into the composition of the first sound, on the ground that this would involve a want of synchronism in the fibrillar contraction.

Passing, in the second chapter, to the phenomena of the heart's action in relation to its modification by disease, Dr. Hayden considers the causes and mechanism of displacements of the heart, and discusses the theory of their mechanism suggested by Dr. Douglas Powell, that the displacement is the result of traction by the unaffected lung. He rejects this explanation both on theoretical considerations and on the ground of an experiment of his own, in which the sudden collapse of an over-distended lung had no effect in moving the mediastinum beyond its normal position. Reduplication of the first sound is explained by Dr. Hayden as the resolution of the sound into its constituent elements, the impact of the heart against the chest-wall, and the tension of the auriculo-ventricular valves. He founds this explanation on the character of the portions of the reduplicated sound, and the explanation ignores the very obvious analogy with the reduplication of the second sound. The clear dependence of the latter on a synchronism of the two sides of the heart renders Dr. Hayden's different explanation

of the reduplication of the first sound at least improbable. The account of the mode of action of the heart is drawn largely from Dr. Sibson's work, and is followed by a description of the phenomena attending the pulse.

In the chapter on physical signs of disease of the heart, the various murmurs indicative of valvular disease, or due to other causes, are considered at length.

In his account of dynamic murmurs Dr. Hayden discusses incidentally the relationship of heart murmurs and of chorea. His experience gives great weight to the opinion which he expresses, and which, of special interest in connexion with the late discussion on the subject, is at decided variance with that of many modern authorities. He denies all rheumatic relationship of chorea, and does not believe that it is ever due to valvular lesion of the heart, rheumatic or non-rheumatic. The frequency with which vegetations are found post mortem in cases of chorea he considers has not the significance often attached to it, and, on the other hand, shuts off from the advocates of the embolic theory their negative refuge, "that absence of murmur is no proof of the absence of even serious organic disease of the valves of the heart." Further, he turns upon them their own weapons, and asserts that whilst a (permanent?) murmur may be due to other causes than structural alteration of the valves, "the latter, in a degree capable of deranging health and appreciable to the eye of the anatomist, must and actually does always give rise to murmur so long as the heart acts with ordinary vigour."

Twenty-five pages are devoted here, and as many further on, to the history of the presystolic murmur, of the significance of which Dr. Hayden was a very early advocate. Every article which has been published on the subject is analysed in more or less detail. Murmurs occurring between the sounds and not connected with either—"intersonal" murmurs, as he terms them,—Dr. Hayden considers we must reckon as a numerous class, and gives examples of post-systolic, pre-diastolic, and post-diastolic varieties. The two latter varieties appear to have been associated in Dr. Hayden's cases with partial incompetence of the aortic valve, and are new rather in name than in fact.

The short chapter on the causes of heart disease is less exhaustive in its style than the rest of the book; it consists of brief extracts and tables from various writers strung together with a few unimportant remarks. The treatment of this subject is indeed disappointing. When we turn, for instance, to learn what most modern opinions teach on the influence of syphilis as a cause of heart disease—a subject of great interest, of which something is known, and much more is, with reason, suspected,—we find it dismissed with the inadequate remark that "Ricord describes morbid changes of the heart and other organs which he compares to syphilitic tumours or nodes." A few facts about nodular syphilitic growths in the heart are given further on.

The long account of pericarditis is chiefly remarkable for an interesting collection of cases of pericardial adhesion, compared as to the effect upon the walls of the heart. The cases are drawn from the records of the Pathological Societies of London and Dublin, and Dr. Hayden's own note-book. He finds, from a comparison of the fifty-four cases, that only seven can be adduced in support of the doctrine that simple adhesion of the pericardium is competent to give rise to hypertrophy of the heart; and even these are not reported in such a manner as to inspire confidence, since in several the urine was not tested, nor was the disease of the kidneys excluded by examination after death. He therefore believes that, when hypertrophy of the heart is met with in cases of adherent pericardium, the connexion is, in the majority of cases, purely accidental. Dr. Hayden's treatment in acute pericarditis is invariably to administer mercury in small and frequently-repeated doses, half a grain of calomel every hour, pushed to slight salivation, subsequently iodide of potassium and counter-irritation; and for the removal of fluid, diuretics and purgatives, not blisters. Some cases of pericarditis are appended.

The section on diseases of the walls of the heart is chiefly remarkable for the exhaustive account, historical and clinical, of the conditions of hypertrophy, dilatation, and fatty degeneration. In the description of the first of these there is little that is new. Aneurism of the aorta is removed from its list of causes on the ground of some original observations which show, in Dr. Hayden's opinion, that aneurism of any part of the aorta is more frequently associated with a normal ventricle than with either hypertrophy or dilatation, and that the association of hypertrophy with aneurism, frequently observed, is accidental. The causes and symptoms of fatty degeneration are examined by the help of some extensive and valuable tables compiled chiefly from the Pathological Society's records. From these he believes that it is a disease of middle rather than of advanced life (although the figures point to the latter), and that men are affected twice as frequently as women. The "Cheyne-Stokes breathing," the peculiar rhythmical irregularity of respiration which has attracted so much attention, is discussed at length, and Dr. Hayden offers for it this explanation. The only lesion of structure commonly found in the cases being atheromatous and calcareous change, with dilatation in the arch of the aorta, he suggests that in sleep and repose, when the heart's action is most tranquil, the systemic capillary circulation fails from want of the contributory aid rendered in health by the elastic reaction of the aorta. Hence arise a suspension of tissue respiration and accelerated breathing, and as the systemic capillary circulation becomes established, the *besoin de respirer* is less urgent, and respiration gradually subsides till a period of apnœa arrives, to which the exhaustion of the patient contributes.

An extensive table presents the circumstances, symptoms, physical signs, mode of death, state of the aorta, state of the valves of the cavities and walls of the heart, of the fibres, and of other organs in eighty-eight cases of fatty heart. It is intended to be supplementary to the tables published by Dr. Quain in 1850.

Other forms of degeneration of the heart and growths in its tissue are subsequently described, and then the symptoms and signs of endocarditis. It is interesting to find that Dr. Hayden confirms the opinion of many careful observers that the murmur of endocarditis never commences suddenly; that its gradual development can always be detected in an alteration of the sound before a distinct murmur is perceptible. In the treatment of endocarditis Dr. Hayden adopts the same vigorous measures which he employs in pericarditis, leeching, and mercury to salivation, being his usual measures.

Diseases of the several orifices of the heart are described at great length, with the addition of numerous illustrative cases, and a very interesting table is given of eighty-one cases of mitral stenosis. This and other chapters are illustrated by numerous sphygmographic tracings. Neuroses of the heart are described at length, and among them angina pectoris and exophthalmic goitre receive their due attention. Both in this chapter and in the last, on diseases of the aorta, Dr. Hayden gives us the same wide review of contemporary and historical facts and opinions, as well as numerous cases.

The work is certainly not one for students, but as a conspectus of the scientific literature of diseases of the heart and aorta, and as a record of original experience and opinion, it deserves an honourable place in medical literature.

DRS. T. LEWIS AND D. D. CUNNINGHAM ON THE SOIL IN ITS RELATION TO DISEASE.

THE Appendix to the last Annual Report of the Sanitary Commissioner (Dr. J. M. Cuningham) with the Government of India, contains an excellent paper "On the Soil in its Relation to Disease," by Drs. Lewis and D. D. Cunningham. Since Professor Pettenkofer directed attention to the composition of the air in the soil, and proposed the carbonic acid in it as a measure of its impurity, various researches have been made, the general result of which is not on the whole favourable to Pettenkofer's proposal. The permeability of the soil—i.e., the freedom with which atmospheric air enters it, as well as the composition of the soil itself, so affects the amount of carbonic acid in the air in the interstices, as to render it probable that the carbonic acid cannot be taken as a measure of ground impurity. But this, while it throws a difficulty in the way of forming an opinion as to the amount of impurity in soil-air, does not at all lessen the belief that a knowledge of the composition of soil-air is of great hygienic importance.

The report of Drs. Lewis and Cunningham is the best we have yet seen on this topic, and it is a most creditable piece of work. It examines into all the conditions during an entire year; the amount of carbonic acid in the soil-air in two localities at 3 ft. and 6 ft. in depth in each case; the temperature of the ground at those depths; the temperature of the atmosphere; the velocity of the wind; the rainfall and the height of the ground-water are given; and a series of graphic representations place the results before the eye of the reader very clearly.

In Calcutta the lower stratum of ground-air is richer in carbonic acid than the higher stratum. The maximum monthly amount in the first locality occurred in September, when it reached 12 volumes per 1000 of air; the minimum was from March to July, when it was nearly 8 volumes per 1000. In the 3-foot stratum the air was at its maximum also in September, when the monthly average was 11 per 1000, and at its minimum in May, when it was only 4 per 1000. The carbonic acid was, therefore, less in quantity 3 feet from the surface than at 6 feet, and suffered greater fluctuations, but the period of maximum and minimum coincided in the two depths. The authors compare these results with the Munich rates, but we will not enter into this. In the second locality the observations were only carried on for six months, and the remarkable fact appears, that while the fluctuations in the amounts of carbonic acid in the two localities fairly corresponded, the amount of carbonic acid was considerably less in the second locality than in the first. These localities were only 50 yards apart, and to all appearances the nature of the soil was the same; and yet, while in locality No. 1, at 6 ft. from the surface, the maximum carbonic acid was 12 and the minimum 7 per 1000 volumes, in locality No. 2 at the same period the numbers were 7 and 5. The authors remark that "the processes going on in the soil must have differed materially in degree if not in kind, and if such processes have any influence on health, it is obvious that people inhabiting one end of the building must have been exposed to different hygienic conditions from those living at the other end." This is possible, but to us the inference would rather be that carbonic acid is really no measure of the processes going on in the soil, and that some other measure must be devised.

On comparing the amount of carbonic acid in the soil-air with the temperature of the soil, the authors found that the lines of temperature neither directly nor conversely corresponded with those of the carbonic acid. At the same time, one point came out—viz., that the periods of greatest difference in the amounts of carbonic acid in the 3 ft. and 6 ft. strata coincided with the greatest difference in temperature between these strata. Perhaps this was a mere coincidence; at any rate, it was the only indication of any relation of carbonic acid to soil temperature. The soil temperature was at its lowest in January, when the weekly mean at 3 ft. reached 68°, and at 6 ft. 72°, and at its highest in July and August, when the temperatures were 83° and 82°.

The atmospheric temperature in no way influenced the carbonic acid in the soil-air. The rainfall had a distinct influence on the carbonic acid, the main periods of elevation of which occurred with the rainfall, and the period of depression occurred with drought. There was also a general coincidence with the water-level. The velocity of the wind did not apparently affect the carbonic acid, except that in April and May, when the movement of the wind was great, the carbonic acid in the 3 ft. stratum of one of the localities which was exposed suddenly sank, while in the other more sheltered locality no such sinking occurred. The authors think this discrepancy may have been due to the wind.

The outcome of the whole inquiry as to the carbonic acid in soil-air is thus, we think, to show that no great results arise from it; at the same time, we trust that this investigation may still be carried on in Calcutta, and the question definitely settled.

Another very interesting point referred to by the authors is the relation of the total Calcutta mortality and the prevalence of fevers, dysentery, and cholera to the soil. Nothing obvious was made out, except with regard to cholera. The authors give a graphic plate, showing the weekly cholera mortality in Calcutta in connexion with the water-level, rainfall, and temperature of air and soil. They remark that the "only remarkable coincidence appears to lie in the converse relation which water-level, and in a less marked degree rainfall, bear to the prevalence of the disease;" when the latter is "at a maximum the water-level is at a minimum, and when the water-level is at a maximum the prevalence of cholera is at a minimum." On looking at the table, however, we think this expression is rather too strong, and the point is of so much importance that we will give the figures for the whole year.

Week ending—		Distance of soil-water in feet and inches from surface at Alipore near Calcutta.	Deaths from cholera in Calcutta in the week.
July	5th, 1873	15ft. 0in.	13
	12th, "	14ft. 11in.	11
	19th, "	14ft. 6in.	14
	26th, "	14ft. 2in.	15
Aug.	2nd, "	13ft. 5in.	15
	9th, "	12ft. 9in.	4
	16th, "	11ft. 7in.	14
	23rd, "	11ft. 0in.	3
	30th, "	10ft. 8in.	4
Sept.	6th, "	10ft. 5in.	5
	13th, "	9ft. 9in.	9
	20th, "	10ft. 1in.	4
	27th, "	10ft. 3in.	6
Oct.	4th, "	10ft. 8in.	8
	11th, "	10ft. 11in.	6
	18th, "	11ft. 9in.	5
	25th, "	12ft. 3in.	4
Nov.	1st, "	12ft. 4in.	4
	8th, "	12ft. 4in.	2
	15th, "	12ft. 11in.	5
	22nd, "	13ft. 4in.	5
	29th, "	13ft. 5in.	5
Dec.	6th, "	13ft. 8in.	9
	13th, "	13ft. 10in.	5
	20th, "	14ft. 2in.	3
	27th, "	14ft. 1in.	12
Jan.	3rd, 1874	14ft. 4in.	7
	10th, "	14ft. 6in.	11
	17th, "	14ft. 9in.	6
	24th, "	14ft. 9in.	23
	31st,	14ft. 10in.	27

Week ending—		Distance of soil-water in feet and inches from surface of Alipore near Calcutta.	Deaths from cholera in Calcutta in the week.
Feb.	7th, 1874	14ft. 10in.	46
	14th, „	14ft. 10in.	47
	21st, „	14ft. 10in.	43
	28th, „	14ft. 10in.	37
March	7th, „	14ft. 10in.	40
	14th, „	14ft. 11in.	38
	21st, „	15ft. 0in.	44
	28th, „	15ft. 0in.	40
April	4th, „	15ft. 1in.	58
	11th, „	15ft. 0in.	60
	18th, „	15ft. 2in.	36
	25th, „	15ft. 1in.	54
May	2nd, „	15ft. 2in.	93
	9th, „	15ft. 2in.	70
	16th, „	15ft. 2in.	70
	23rd, „	15ft. 2in.	37
	30th, „	15ft. 2in.	32
June	6th, „	15ft. 2in.	27
	13th, „	15ft. 2in.	20
	20th, „	15ft. 2in.	25
	27th, „	15ft. 2in.	18

We have given this table in full not only because it is the most complete yet published, but because there is sure to be difference of interpretation. From July to Sept. 13th the water rose in the soil until it was five feet nearer the surface. The deaths from cholera, never very many, fell in August, and, at the time of highest water, had fallen to 21 in the preceding month. But from Sept. 13th the water fell with great regularity to the end of the year, and yet the cholera deaths remained practically the same. In the four weeks of September there were 24 deaths; in the four weeks of December, 29. Not until January 17th does a decided rise occur in the cholera deaths, and then the water was 14¼ feet from the surface. The deaths remained at nearly the same number until May 2nd, when they reached the maximum of 94. But between January 17th and May 2nd the water sank only five inches, and that was at a depth of 15 feet from the surface; while in the previous four months it had sunk 4 feet—namely, from 10 to 14 feet—without any more marked influence on the cholera deaths, although the drying ground was much nearer the surface. To this it may be said that the influence of the drying soil required time to act, and that we must look at the whole coincidence instead of trying to dissect it. But if this be so, how can we account for the last part of the table? The water-level remained from May 2nd always at its lowest point—viz., 15 ft. 2 in.—from the surface until June 27th, and yet during the whole of this time the cholera deaths were rapidly falling from 93 to 18 per week. If, then, the drying soil required time to act, what stopped its continued action after May 2nd? Why did it not increase the cholera after May 2nd? The temperature of the ground was then rising; the water-level was as low as it could be, and yet cholera declined. The coincidence, not it appears to us strong anywhere, fails here completely. At the same time it would be rash to say that the question is at all clear. In Calcutta the rule as to cholera is that it begins to increase in February, and is most fatal in March, April, and May. April appears, from Macpherson's tables, to be the worst month (19,328 deaths in twenty-six years), and August the best month (3440 deaths in twenty-six years). Now, in April, the water-level is lowest (15 ft. from surface), and in August is rising to its maximum of 10 ft. from the surface, which it reaches in the middle of September. Here, then, it may be thought is a coincidence too striking to be put aside. It may be so, but, as already pointed out, the table before us shows, it seems to us, points which are not to be reconciled with this view. At any rate, we trust the observations will be continued, and the matter as regards Calcutta set at rest.

New Inventions.

NEW FORM OF PESSARY.

THE pessary of which an engraving is given possesses manifest advantages. It consists of a watch-spring coiled spirally, with the extremities left free; this is encased in caoutchouc, and in its external appearance resembles many of the various ring pessaries at present known. The advantages of this pessary will appear by reference to the engraving on the left, where it is shown collapsed for facili-

tating its introduction; when *in situ* it expands to the circular form, as shown on the right of the figure, or assumes such other shape as may best accommodate its contact with surrounding parts. The pessary is made in sets of three, and has the additional merit of being inexpensive. A detailed explanation of these pessaries appeared in a recent number of *Le Progrès Médical*. It is manufactured by Messrs. Salt and Son, Birmingham.

IMPROVED TRUSS.

MEDICAL men are often troubled by patients with regard to their trusses, which they cannot fit so as to keep up the hernia. Upon examination it is frequently found that the pad simply requires to be turned a little to the right or left, or a little upwards or downwards, or inwards, as the case may be. The pad soon works back into its old position, and the hernia passes as before, so that the truss has to be sent back to the instrument-maker with instructions to alter the direction of the pad.

Mr. Millikin, of 35, St. Thomas's-street, Borough, S.E., has put before us a truss which seems to overcome many disadvantages. It will be seen from the diagram that the truss consists of the old German pad and spring, between

which is placed a ball-and-socket joint, which can be fixed in any direction whatever, and also allows of great or little pressure, to be exercised at will. The fixing handle, c, folds down upon the truss, so that it does not show through the dress. The pad may be placed in any position. The extra weight and thickness are inconsiderable. The instrument is well made and is not expensive.

THE LANCET.

LONDON: SATURDAY, DECEMBER 4, 1875.

IF we have seemed to oppose, with unusual pertinacity, Mr. MARSHALL'S proposal to institute a compulsory examination in Anatomy at the Royal College of Surgeons at the end of the first winter session, it is not because we are ignorant of the existence of some of the evils which that scheme is intended to remedy, but because we feel that it will not only not remedy them, but will call into activity others that are at present practically dormant and of no effect. Mr. MARSHALL has recognised the existence of the disease, but has failed to detect its cause, and has therefore erred in the measures he proposes for its treatment. We fully admit the large number of the rejections at the primary examinations, and are not unwilling to believe that the knowledge of anatomy acquired by many of the candidates is both scanty and imperfect; nor can we gainsay the statement that much valuable time is wasted in the first year of the student's curriculum. But while Mr. MARSHALL would account for these things by the mental incapacity of the average student, the want of training and of intellectual discipline of those who *now* enter the medical profession, and the inherent idleness and moral depravity of medical students, we prefer to acknowledge other causes—namely, the scanty and irregular supply of subjects for the purposes of dissection furnished to the medical schools by the Inspector of Anatomy, and the false and defective method of testing the candidate's knowledge adopted by the Board of Examiners and sanctioned by the Council of the College. If this explanation be correct, it is manifest that the College has in its own hands a simple remedy that is both effectual and satisfactory, without hatching a scheme that, if rigorously carried out, would inflict great hardship and injustice on the student, whilst it left the *fons et origo mali* untouched.

In another column we publish a return of the subjects supplied by the Inspector of Anatomy to the Metropolitan Medical Schools since the commencement of October. A glance at that return will suffice to show that there are at the present moment many students, both first and second year, who must perforce remain idle for want of the opportunity to dissect. As we showed last week, for every hundred first-year's students at least fifty subjects will be required in the course of the winter session to furnish an upper and a lower limb to each student. In addition to this, each student ought to dissect all the parts of the body in the course of the twelve or eighteen months that intervene between the end of the first winter session and the first professional examination; and at least fifty subjects will be required for every hundred second- and third-year students, in addition to the parts of the subjects supplied for the first year's men that are available for senior students. But besides these, five or six subjects will be required by the teachers and lecturers at each school for the purposes of demonstration and instruction. In the course of one year, therefore, where there is an anatomical class of two hundred students, half of whom are first-year and the other half second- and third-year, about one hundred subjects will be necessary to ensure adequate study and instruction; whereas the supply in some instances is not much more than half of this. It may be objected that this estimate is too high, and that if a student dissect the limbs during his first year he need not dissect them again in his second or third year. We maintain, however, that this estimate does not exceed the actual requirements, and that to allow the necessarily imperfect dissection of the limbs in the first year to exempt the student from dissecting these parts again in his second or third year would be a short-sighted policy. An intimate acquaintance with the anatomy of the muscles, vessels, nerves, bones, and ligaments of the limbs is of the highest importance to the surgeon. The reduction of fractures and dislocations is greatly facilitated, indeed sometimes only possible, by the aid of an accurate knowledge of the shape of the bones, the nature of the articulations, the position of the ligaments, and the situation and action of the muscles that move the limb or protect the joints. The arrest of hæmorrhage and the safety of life or limb are often entirely dependent on the surgeon's knowledge of the position and relations of the bloodvessels that pass from the trunk and are distributed in the limbs; and the records of surgery prove that, unless the surgeon be thoroughly acquainted with the anatomy of the extremities, irremediable errors in diagnosis and serious misapplications of treatment may at any time occur. Compared with the extremities, the other portions of the body are of minor importance to the majority of practitioners, so that, even if the student were to satisfy the requirements of the elementary examination on the anatomy of the limbs at the end of the first winter session, he should still be compelled to dissect them again before the ordinary Primary Examination. To enable him to do so, a supply of subjects equal to that we have named would be desirable. If the College of Surgeons wishes to attack the evil at the fountain-head, it should use its influence to secure the adoption of some measure by which an adequate supply of subjects would be ensured to the medical schools, even if it be necessary to put a little pressure on the venerable Inspector of Anatomy, whose post seems of late to have lapsed into a sinecure. What is especially wanted is a good supply of subjects at the early part of the session, to enable students to commence dissections without delay. The alteration made in the Anatomy Act in 1871 empowered the lecturers on anatomy to collect and preserve subjects during the four months prior to the beginning of the winter session, but owing to the difficulty of procuring the bodies it is almost impossible to reap the full benefit of that regulation. There are complaints from several teachers, who were prepared to receive any number of subjects during the vacation, that they were unable to procure anything like enough for their purpose. The result of this deficiency is, as we pointed out last week, that two or three months of the session pass away at the large schools before any of the first-year students can obtain parts for dissection, and it is not until after Christmas that every student has been able to get a

part. Whereas, if there was a proper supply of subjects early in the session, each student would be able to begin dissection as soon as he had learnt osteology, and, having no temptation or excuse to be idle, "would," to use the words of Mr. MARSHALL, "feel at once that he must work without delay; he would understand for what and how, within defined limits, he is to devote his time and energy, cultivate his powers of observation, arrangement, and memory, and use his opportunities of anatomical study." And to have work on which students could at once begin "would probably be the means of diverting some students every year from an idle and profitless course of life; and it would save others, now injured, perhaps ruined, from want of a defined purpose, from irresolution, inexperience, and defective foresight."

We venture to believe that, if the suggestions we have thrown out were acted upon, a healthy stimulus would be given to the industry and ambition of students and to the efforts of teachers, and that, as soon as the College had adapted its mode of examination to the requirements of modern times, the evils which are now so deeply deplored would be reduced to a minimum, if not entirely eradicated.

THAT a causal connexion exists between constitutional syphilis and aneurism has long been a matter of faith with many, which has now and then found expression, but seldom in a more striking and, at first sight, even convincing manner than in the paper read before the Royal Medical and Chirurgical Society at its last meeting, by Mr. FRANCIS J. WELCH. Enjoying unusual opportunities for the study of diseases of the vascular system and of syphilitic lesions, he has arrived at the conclusion that the unusual prevalence of aneurism of the aorta among soldiers is in great measure owing to the prevalence of syphilis in the ranks. He has found that as many as 50 per cent. of the cases of aneurism he met with, and 46·1 per cent. of examples of aortic disease, were the subjects of well-marked syphilis, the lesion being an endarteritis, leading to dilatation of the vessel and to new growth in the walls of the aneurism. In round numbers, he places 66 per cent. of the cases of aneurism, all presenting this particular endarteritic change, to the account of syphilis, the remainder being chiefly divided between alcoholism and rheumatism. With this broad and clear proposition before them—viz., that syphilis is a direct cause of aneurism by its leading to a distinct change in the inner coat of the aorta,—it cannot be wondered at that several objections were raised to its acceptance by the speakers in the debate which ensued upon the reading of the paper—objections which were fairly faced by Mr. WELCH, who candidly admitted that he was astonished at the results he had obtained. The question raised in the course of the debate as to the precise significance attached to the word "syphilis" in the Army Returns need not be followed here.

The pathological side of the question is, however, one which may fairly well be reviewed, because it is here, if anywhere, that we may expect to find points of agreement between the civil and military records. And, firstly, it cannot be denied that syphilis does play a certain part in the etiology of aneurism, but withal a subordinate one, and certainly not to such an extent as Mr. WELCH would have us to believe. That syphilis does lead to fibroid disease and degeneration of the bloodvessels is an admitted fact; but that it is only one factor, and by no means an important one, is, we think, shown by reference to recorded cases of aneurism. One argument, not without weight, is that adduced, we believe, by Mr. MYERS in his paper "On the Prevalence of Aortic Aneurism in the Army" (Pathological Transactions, vol. XX.); to the effect that if syphilis be a potent cause in the production of aneurism, how are we to account for the striking disproportion between the prevalence of the latter affection among the male and female portions of the community? In one of the metropolitan hospitals for the seven years ending 1873 (we quote from the Registrars' Reports), we find that, out of 39 cases of aneurism of the aorta under treatment, there were but 5 females; whereas in the same institution during the same time there were of constitutional syphilis as many as 221 males and 283 females treated in the medical and surgical wards. Or if we refer to the volumes of the Transactions of the Pathological Society, we find that of specimens of aortic aneurism shown at that Society since its foundation no fewer than 105 occurred in male subjects, and 17 in female subjects. Yet of this large number of cases, in 110 there is no mention at all made of syphilis in the previous history of the patient, its presence being signified in only 7 cases, and its absence noted in but 5. We would by no means desire, however, to lay too much stress upon statistics such as these; for it is but fair to mention that it is only in the later years that we find any reference, positive or negative, made to syphilis in these cases at all. At the same time, were any of these subjects "saturated with syphilis," that fact could not have escaped notice, and would have been recorded. In one case, indeed—that of a specimen of "nummular aortitis," shown by Dr. GOODHART last year,—there were evidences of syphilis obtained after death, although no history of the disease was extracted from the patient. In these records, too, the fact of intemperance is noted frequently, and of rheumatism occasionally, where syphilis finds no place.

There remains, however, another aspect of this question—viz., how far must we accept the view propounded by Mr. WELCH that the endarteritic changes he describes are syphilitic? A similar opinion has been long held by Dr. AITKEN, who, however, so far as we understand him, would have us to believe that there is a specific feature stamped upon the lesion by which it can be recognised. Mr. WELCH, however, admits that this nodular endarteritis terminating in atheroma is met with in states other than syphilitic. Now of this we are certain: that there is a special form of arterial disease—not an endarteritis, but an affection rather of the outer coats of the vessel—which is undoubtedly syphilitic. It is met with perhaps most frequently in the cerebral arteries, and is a not unusual cause of thrombosis. But endarteritic changes are met with daily in post-mortem examinations in at least one-half of the cases examined. Following the author of the paper on this point, we should get one-fourth of the cases examined in the deadhouse to be subjects of syphilis; and as these cases may be supposed to be representative of the whole community, we may fairly infer that

in that proportion does syphilis exist amongst us! Such a result would not be, to say the least, encouraging in the civil community, in whatever light it may be regarded in the army. Then the intimate pathology of the change in question bears on it nothing distinctive of syphilis. To be sure, this is not saying much, at any rate in the present state of pathological science, which apparently sees nothing in syphilitic lesions distinctive from "chronic inflammation"—whatever that vague and unsatisfactory phrase may mean. But this, at any rate, we do know—that changes such as these are produced by undue strain upon the vessels; and we cannot help thinking, with Mr. MYERS, that to this cause is due the great prevalence of aneurism among soldiers. Aneurism is proportionately almost as prevalent among hammermen and smiths, and we do not invoke syphilis to its etiology in these classes. The contention, indeed, lies within a narrow compass—viz., whether syphilis is a direct or a predisposing cause. Mr. WELCH thinks the former; his opponents the latter, and regard undue vascular tension to be the chief factor in the production of aortic disease and of aneurism. The comparative infrequency of syphilitic disease of the heart among soldiers, as pointed out by Dr. POWELL, is certainly significant.

Although, then, we may differ from Mr. WELCH, we accord him all praise for having raised this question and placed it before us in so striking a light. It will serve the very useful purpose of directing attention to the subject, and will lead doubtless to the publication of facts bearing upon it culled from other branches of the community than the public services. To all those who intend to take up the subject we would venture to give one word of warning—viz., to be particularly careful as to the data upon which the question of the existence or non-existence of syphilis is based. There are notoriously few subjects more difficult to elucidate from the history of the patient himself than that of syphilis, and much of the material accumulated on this head must be regarded with suspicion, unless there be recorded clear and distinct evidence of the syphilitic taint. In such an investigation, too, the subject must be viewed from all sides; and, having obtained a history of syphilis, any other possible cause of vascular derangement and deterioration must be sought for, and its absence proved, before it will be possible to state positively that the disease in question is at the root of the arterial lesion. As the case stands at present, most of us would agree with the cautious and thoughtful words of Dr. PARKES—"There is no reason to think that syphilis prevails more among soldiers than among the civil male population of the same class. It is therefore unlikely that an excess of syphilis, if it really occurs among soldiers, and if it actually predisposes to aneurism, as seems probable, could produce eleven times as many aneurisms as in civil persons."

THE great trial for murder which has engrossed public attention for so many weeks past was brought to a conclusion on Wednesday. The verdict of "Guilty" against HENRY WAINWRIGHT was the only one which it was possible for the jury to return, so complete in all respects was the chain of circumstantial evidence against the prisoner; but the complicity of THOMAS WAINWRIGHT, even as an accessory after the fact, was a matter which was far less clearly demonstrated by the prosecution. Much of the evidence, and the most important evidence, bore upon facts having a medical interest; and seldom has the science of medical jurisprudence been laid under heavier contribution than in the present instance.

The first point to be determined was as to whether the deceased was the victim of suicide or murder. The counsel for the defence dwelt with some emphasis on the possibility of the unhappy woman having committed suicide; but a calm consideration of the facts renders such a view, in our opinion, absolutely untenable. Two bullets were found within the skull, one in the cerebellum, and another lying over the body of the sphenoid bone. The line of the former was marked by very considerable extravasation, so that it was probably the first fired, and certainly entered the skull during life. A third bullet had been fired, apparently from behind, and had lodged in the hair-pad worn by the deceased. Of these bullets it may be said that the wounds caused by two of them were sufficient to produce almost instantaneous death, while the concussion of the third which lodged in the pad was probably sufficient to produce insensibility. Apart from other facts, it would be in the highest degree improbable that the bullet found in the pad had been fired by the deceased herself. In addition to the bullet wounds, a deep gash dividing the trachea and big vessels, and having the appearance of having been cut *from right to left*, was found in the throat. Although this wound had divided the big vessels, it had bled only slightly, so that its infliction was certainly at a time subsequent to the injuries inflicted by the bullets. The counsel for the defence urged that it might be possible for a person with two bullets in the brain to inflict a suicidal wound in the throat, and he stated that he had read of cases in "TAYLOR" which gave credence to such a belief. It is true that in the work referred to several cases are recorded in which consciousness was retained after very severe injuries to the head, but such cases are mentioned as exceptional, and in the case under consideration the almost entire absence of hæmorrhage from the throat wound, and the strong probability that one bullet was fired directly from behind, seem to render the theory of suicide absolutely untenable.

The next point was, how long had the deceased been dead? To this the medical witnesses very properly gave a most guarded reply, that, judging from the amount of mummification and adipocerous change, at least a year had elapsed. On this point both Mr. BOND and Mr. LARKIN were asked in cross-examination "whether it was not a fact that the process of decomposition was divisible into two well-marked stages, one characterised by evolution of inflammable gases, and the other characterised by mummification?" We confess we have been unable to discover the import of this question, and we desire merely to place it on record as a forensic curiosity. It is at least a presumed fact that the evolution of gas can be hardly recognised in bodies buried immediately in the earth.

The great medical interest of the trial centred in the identification of the remains, which were too far decomposed to allow of any superficial recognition. The presence of the female organs of generation placed the sex beyond a doubt,

and it was rendered highly probable from the discovery of a wedding ring and "keeper" in the grave that the deceased had at least stood *in loco uxoris*; but, from an examination of the uterus, Mr. BOND and Dr. MEADOWS (although they both agreed as to the impossibility of speaking with certainty on the point) had come to different opinions, the former speaking in favour of, and the latter being opposed to the view of previous pregnancy.

That the colour of the hair of the deceased coincided with that of HARRIET LANE was not disputed, and consequently the question of the effect of chloride of lime on the hair was not raised, albeit that it seemed one out of which counsel might have made some capital.

The age of the deceased was a point of great importance, and we cannot admit that it was established with as much certainty as it might have been. The witnesses relied entirely upon the evidence afforded by the wisdom teeth, three of which were fully and one partially cut. From this it was inferred that the age of the deceased was about twenty-five. Surely, however, this was a somewhat hasty conclusion from such data. The period of the eruption of the wisdom teeth is generally stated to be between seventeen and twenty-five, and it is not unfrequently delayed even later. The condition of the teeth of the deceased would show that she was certainly over seventeen, but we cannot see that any other conclusion could be drawn from this fact. It was to be regretted that no examination was made of the epiphyses of the bones, from which, we think, much valuable information might have been derived.

Mr. AUBIN'S evidence about the sutures of the skull was wholly inexplicable, and it was said that his confusion was so great under cross-examination, that the counsel by whom he was called found it difficult to account to the jury for his answers on those subjects to which he had come to speak as an expert.

With regard to the scars, that on the right leg was fully established, while that alleged to exist on the left leg remained in the condition of a mere allegation. It is certainly surprising that neither side made any attempt to demonstrate the presence or absence of linea albicantes upon the abdomen.

The height may be considered to have been fully established, and the trifling discrepancy of three-eighths of an inch, if not due to faulty apposition of the limbs, may be considered as accounted for by the theory put forward by Mr. BOND as to the shrinking of the intervertebral cartilages.

The case will long be remembered as one which presented points of unusual difficulty to the medical jurist, and it was undoubtedly due to the great care shown by Mr. BOND and Mr. LARKIN in carrying out the necessary investigations and examinations that the satisfactory bringing home of the charge to the prisoner was due, and we are glad to observe that the services rendered by these gentlemen received a handsome recognition from the Lord Chief Justice.

THE proceedings of the meeting of the Medical Defence Association held this week present features of considerable interest to a large number of our readers. Apart from the general and very difficult question of the way in which unqualified medical practice should be dealt with, the special experience of this Society, or rather of the Eastern Branch of it, as a prosecuting Society, is both interesting and instructive. Under the guidance of their able legal advisers, Messrs. GREEN and PRIDHAM, of Bedford-row, this branch has instituted no less than three successful prosecutions against unqualified practitioners who abound at the East-end of London, and who are too often protected in some way by members of the profession. The curious thing about these prosecutions is, that they have been carried out, not under the Medical Act, but under the Apothecaries Act. It is very remarkable, after the medical legislation of 1858, that we should be reverting to that of 1815. But the fact is easily explained. The use of the Medical Act, as far as the punishment of unqualified practice is concerned, is very limited. It only contemplates the prevention of the false use of titles. To a considerable extent it has succeeded in this. But a quack, while avoiding the false use of any recognised titles, may easily give his house or shop a name which has the effect of conveying the impression to the public that he is a medical practitioner. But the Apothecaries Act is available for punishing a man for practising. It would, after all, be very monstrous if there were no such law. The Legislature in its wisdom has recently made it penal for men to sell poisonous drugs without being licensed to do so by a Society constituted for the purpose of examining men in their knowledge of such things. With what consistency could it abstain from forbidding ignorant men, under the guise of medical practitioners, from dispensing potent drugs? This would be to permit a greater evil while prohibiting a lesser one. And the profession is not a little indebted to the Eastern Branch of the Medical Defence Association for reviving the use of this comparatively forgotten Act.

As regards the general question, we entirely agree with the President, Dr. RICHARDSON, and other speakers at the meeting that, if the Association is to succeed and to command attention and respect, it will have to look at unqualified practice rather from a public standpoint than from a professional one. It augurs well that this view of the matter was general and found clear expression in one of the amendments. It cannot be too frequently or plainly stated that the public suffers more than the profession by unqualified practice; that deaths happen which should not happen; and that worthless information as to the cause of death is taken in great quantity from unqualified practitioners by the registrars of the country, and with the consent of the Registrar-General, thus vitiating the public records of mortality. As Dr. ROGERS said, if the public get the idea that the sole object of the members of the Association is to protect the medical profession, the Association will fail. It is to be hoped that ere long we shall have a public prosecutor who will initiate and carry through prosecutions against breaches of the Medical Acts. Pending this the medical corporations ought to do the work. But, failing them—and they are very indifferent,—we do not see how the work is to be begun unless it be undertaken by some such Association as that under discussion. We see that such action on the part of a Medical Association—still more of a medical man—is invidious and

liable to misconstruction. But we must hope for such a display of wisdom and prudence in these prosecutions as will prevent such misconstruction. And we would urge upon the Association to use its influence to procure the appointment of a public prosecutor who should relieve it of prosecuting functions.

Annotations.

"Ne quid nimis."

"THE LANCET" COMMISSION ON LUNATIC ASYLUMS.

NOTHING marks the recent progress of medical science more clearly than the increased attention bestowed on mental disease. Not many months ago it was the reproach of our educational system that the merest tyro, armed with a diploma in surgery, might sign away the liberty and life-long fame of a fellow subject, although his qualification for the possession of this power did not guarantee his having read a page of any work on mental disease, heard a single lecture on the subject, or seen a case. Something has been done to amend this deplorable state of matters, by at least one licensing body. This glimmer of light perhaps only makes the general darkness more apparent, but it may be welcomed as a portent of better days. Before, however, the study and treatment of disease of the mind can be placed on a footing of equality with the study and treatment of disease of the body, much remains to be accomplished. The first step should be to collect the facts in regard to insanity, its conditions, cure, and mortality. Such data can only be obtained in the asylum. With a view to obtain and arrange the information required, we have instituted an inquiry at some of the principal institutions in and near London. The first of a series of Reports embodying the facts observed and collected will be found in this day's issue. The asylum selected for the introductory notice is the most recent in construction, and, on that account, will offer points of interest with which other asylums may be conveniently compared. By devoting some space to this first report, we shall be able to curtail the summary of features calling for description in the reports which follow. The deductions as to matters of moment, such as the distribution of cases in institutions, on the basis of a classification into "curable" and "chronic," and the success or failure of particular methods of treatment, will be deferred until all the reports are before the public, when comparisons may be fairly instituted. Such evils and abuses as may be discovered will be fearlessly exposed, but it is needless to say the inquiry has not been undertaken in any spirit of suspicion, and the aim is primarily scientific and professional. To the public an inquiry like that now in progress can scarcely fail to prove of vital interest. It will show how far the needs and comforts of the insane are cared for, the distressing symptoms of their mournful maladies alleviated, and their pains and griefs assuaged. The urgent necessity for such an investigation cannot, we think, be over-estimated or its practical value too highly appraised.

THE MARINE MEDICAL SERVICE.

IN accordance with a request from the medical inspector of emigrants for the port of London, we sent him last week the names of two emigrant ships stated by us (on excellent authority) to have sailed from that port with unregistered surgeons in medical charge. Mr. Humphreys informs us, in reply, that the surgeon on board the *St. Osyth* was registered in January, 1869, and that the *Blairgowrie* (the second vessel referred to) embarked her emigrants at Plymouth (clearing, however, from the port of London), so that the London emigration office was not responsible for the surgeon. We are glad to place Mr. Humphreys' communication on record at once, as it shows that the emigration medical officers are fully alive to the importance of carrying out the law in its integrity. But we may fairly paraphrase in effect the remarks of the *Pall Mall Gazette* on this subject, and ask what steps would or could be taken by any Government officer if he found an unregistered or unqualified surgeon on board? And, moreover, what machinery exists for discovering the qualifications of surgeons on board ships other than emigrant ships? It must be remembered that vessels carrying only cabin (i.e., first-class) passengers, do not come under the notice of the emigration officers at all, nor have these officers, of course, anything whatever to do with large telegraph and other steamships that are compelled by the 230th section of the Merchant Shipping Act, 1854, to carry a surgeon. It is, as we suppose, chiefly on this account that *The Times* comments on the subject; for, as may be seen in a Parliamentary paper just issued, it is quite possible for a large steamship to start for New York, or a sailing and first-class passenger ship to sail for Melbourne, with a medical officer in charge not only unregistered, but unqualified.

Certain lucubrations that have appeared in provincial journals indicate that some of the medical inspectors of emigration are very much "exercised" as to these official returns, and our remarks thereon. But the question is one that (taken, as it undoubtedly should be, in its widest aspects) is entirely beyond their control. Of the fifteen unqualified men quoted in the Parliamentary Returns referred to above, nearly all shipped on whalers, and of the rest, one only could possibly have come under the notice of the emigration medical officers.

These and other remarks as to ship surgeons are made very much in the interests of our own profession as well as of the public. It is our duty to try to raise the status of medical officers in the Merchant Service, as well as in the Royal Navy, to a proper footing. And that status, either as to pay or position, will never be properly attained so long as it can be shown to the public by Parliamentary documents that the law has been broken, and that persons have been sent to sea in medical charge of large ships who would not be allowed to hold an appointment under the Admiralty, the War or Home Offices, the Local Government Board, or, in fact, under any imperial or local department in the kingdom.

EARLY DIAGNOSIS OF SCARLET FEVER.

AT the present moment it is very important for medical men to be acute in the early detection of scarlet fever. Such acuteness is creditable from a scientific point of view, and it is valuable as giving timely information to friends which enables them to isolate the case early, and reduce to a minimum the number of things and persons brought into contact with the patient. For the purposes of this early diagnosis the throat symptoms are most important. The sore-throat of scarlet fever is very different from other forms of sore-throat, and it is one of the earliest available symptoms, being noticeable from the first day of the attack. The appearance is that of an erythematous redness, affecting the soft palate extensively, thus differing materially from the ordinary forms of tonsillitis, which affect the tonsils only in the first instance. As Trousseau says—whose description of scarlatina is worthy of serious study—"In scarlatina, from the first day of the attack, the veil of the palate has a red hue, analogous to, but deeper than, that of the skin." When this condition of the throat is met with

during an epidemic of scarlatina, with a very hot skin and a very quick pulse, accompanied with or preceded by vomiting, with a tongue with thick creamy fur, red borders, and prominent papillæ, the shrewd practitioner will be prepared for a case of scarlet fever. Dr. J. Lewis Smith, of New York, in his excellent work on the Diseases of Children, tells us, in his account of scarlet fever, that vomiting occurs in most cases within the first twenty-four hours, and has considerable diagnostic value. In 90 out of 117 cases which he carefully examined, he found vomiting to occur within the first twelve or eighteen hours. Of course when the eruption appears in addition to the above symptoms, the case is clear enough; but the practitioner who has carefully watched the group of facts which we have described will be as likely to discover the eruption for himself as to have it pointed out to him by others or by the patient.

THE CONTAGIOUS DISEASES ACTS.

THE opponents of the Contagious Diseases Acts have shown that their spirits are reviving. Ours are going down, but for very different reasons from those which they would ascribe to us. The annual conference of the various associations comprising the Northern League for the repeal of the Acts was recently held at Sheffield, and followed by a series of public meetings. If we may judge from the report of one of the meetings at the Albert Hall, at which the Right Honourable Mr. Stansfeld and Mr. Mundella were the M.P.s present, a very large audience seems to have been attracted by the subject and the speakers. The hall was filled in every part, the platform, balcony, orchestra, and stalls being largely occupied by ladies—many of them young,—who, we are informed, appeared deeply interested in the proceedings. Among the speakers, a medical gentleman whose name has stood forth conspicuously as an opponent of the Acts, from a statistical standpoint especially, seems to have proved too much, for he declared that wherever the Acts had been in operation, disease had not diminished but increased. But what we desire to call attention to is the fact that he gave examples of the working of the Acts, and "contended with considerable plainness of detail" for the conclusions he was advocating. Mr. Stansfeld fought, as might be expected, for the position which he has taken up against the legislation of the late Government, of which he was a member, with all the fervour and impetuosity of a convert; and Mr. Mundella advanced a great many statements in regard to the proceedings of the Royal Commission on which he sat as a member for six months, about which we should like to ascertain the testimony and opinion of other members. The great difficulty with which anyone really desirous of learning the facts has to contend is that it is impossible to say what is merely unsupported assertion and what is not. One never knows where to meet the opponents of the Acts, for when driven from a position they either resume it in a short time or bring forward old arguments with new faces. But on one point we should hope there can be no difference of opinion—viz., the indelicacy, indeed the indecency, of discussing such topics before crowded and mixed audiences. The *Sheffield Daily Telegraph* mainly addresses itself, in an able and excellent leader, to this point. Our contemporary says that the audience heard one side only, and they heard much that was utterly unreportable in print. A subject which modest men approach with a certain shamefacedness, or recoil from with irrepressible aversion, is, it seems, fit to be taken up by modest ladies! We cordially concur with our contemporary in all that it says when mincing misses fresh from school, and pious matrons, are asked in a tone of cheerful innocence to occupy their minds with a medical question which cannot be judged of aright unless there is a full knowledge of details, and the details of which are inevitably and unutterably indecent. It refuses to discuss the other side in its pages, holding that a debate on such a matter would itself be a contagious disease of rather a startling character, and one calling urgently for moral deodorisers and disinfectants.

THE WALLS OF THE UTERUS AFTER PREGNANCY.

THE difficulty of determining, from the state of the uterus alone, whether or not a woman has borne a child, was illustrated this week by the medical evidence given before the Lord Chief Justice at the trial of the brothers Wainwright. The difficulty in this case arose, not from the fact that the uterus was in a state of decomposition, but because no marks are left in the uterus which has once been gravid whereby the previous existence of such a condition can be established. At the same time, there are appearances which, when present in the womb, militate against the supposition that the organ has been gravid, though they do not exclude the possibility of such a condition having existed. One of these is unusual thinness of the uterine walls. In the great majority of women who have borne children the walls of the uterus remain permanently thicker than they were in the virgin state of the organ, for involution rarely takes place in such a degree as to reduce the womb to its original size. Yet cases do now and then occur in which the process goes on beyond its normal limits, and the uterus becomes reduced to a size considerably smaller than that of the virgin womb; indeed, it may be reduced to such a size as to elude detection by the most careful vaginal examination.

Other marks which may be left on the uterus as the results of pregnancy and delivery, such as fissures of the cervix, thickening of the lips, changes in the shape of the external orifice, may also be produced by disease and its treatment, so that singly or together they are almost valueless for the determination of the existence of previous gravidity. Some of the witnesses stated that it was not possible to form a positive opinion whether the woman had borne children or not. This accurately expresses our present knowledge of this question, and any further expression of opinion, however elicited, could only lead to conflicting evidence, such as that witnessed at the recent trial.

SANITARY CONDITION OF NORTHFLEET.

THE parish of Northfleet, at the last census in 1871, contained a population of 6515 persons, the considerable increase in which upon the number returned in 1861 was referred in the Census Report to "the extension of cement factories." According to the Registrar-General's last quarterly return, of 56 deaths registered in the Northfleet registration sub-district during the three months ending September last, 13, or more than 23 per cent., were referred to the seven principal zymotic diseases, including 5 from whooping-cough, 3 from fever, 3 from diarrhœa, and 1 each from small-pox and measles. It appears that since the end of September small-pox has become fatally prevalent in Rural-vale, Barrack-field, and Samaritan-grove; and scarlet fever in Wood-street and Bow-street; the whole of these localities being situated within the parish of Northfleet. These facts afford strong evidence of unsatisfactory sanitary condition, and it may be useful to consider who constitute the sanitary authority which is responsible for the public health of this community. The parish of Northfleet forms part of the Union of North Aylesford, the Poor-law guardians of which were, by the Public Health Act of 1872, constituted the Rural Sanitary Authority of North Aylesford, and were invested with the full responsibility in health matters for the whole of the union, excepting Strood, which

forms part of the urban district of Rochester and Strood. Following the example of so many other rural sanitary authorities, the guardians of North Aylesford appointed their two Poor-law medical officers as medical officers of health within their respective districts, with small additions to their previous salaries.

RESEARCHES ON THE MODE OF TERMINATION OF THE NERVES IN THE CONJUNCTIVA.

IN a short paper devoted to this subject in the *Archives de Physiologie* M. Poncet observes that the branches which innervate the conjunctiva proceed from the infratrochlear, frontal, and lachrymal nerves, with a few branches from the ciliary ganglion. In 1859 Krause first published his researches on the terminal corpuscles of sensory nerves. His conclusions were accepted by Kölliker, Ludden, Rouget, Frey, and Ciaccio, but have been lately opposed by Waldeyer. Arnold was also unable to admit their accuracy. Krause found about eighty club-shaped terminal corpuscles in the interior of which the nerves ended. These corpuscles he named *End-Kolben*, or terminal bulbs. The terminal bulbs consist of an envelope of connective tissue, containing a semifluid granular material. One or two nerves, with doubly contoured outline, run to these, twine round them, and penetrate into their interior, where they give off one or two branches that appear as fine short pale fibrils, terminating by slight enlargements. M. Poncet criticises several points in M. Krause's description. In the first place, working with chloride of gold and osmic acid, which were not in use when Krause made his observations, he finds the nerves do not coil round the outside of the corpuscles before penetrating them; secondly, that all the sensory nerve-fibres do not terminate in such corpuscles as Krause supposed; thirdly, that the part of the conjunctiva in which they are most commonly found is the upper and outer segment. This part of the conjunctiva is endowed with exquisite sensibility.

THE ANSTIE MEMORIAL FUND.

THE committee of this fund met on Tuesday night at the house of Dr. George Johnson, Savile-row, and unanimously adopted the report of the executive committee, which we published last week. The executive committee must be congratulated on the happy and successful issue of this business, pleasing alike to the family of Dr. Anstie and to the numerous subscribers to the fund. Speaking roughly, about £1500 of this fund has come from the profession, and about £1000 from the general public. It may be easily imagined that such a sum has not been collected without much work on the part of the executive committee, and especially of the honorary secretaries, Mr. Brudenell Carter and Dr. Wharton Hood. They have their reward in the response of four or five hundred persons in and out of the profession. The rare and mingled virtues of Anstie will be long commemorated by the lofty inscription for which we are indebted to Mr. Simon, and let us hope they will be reproduced and perpetuated in those children whom he loved so much and left so soon, and to whose education the money of the fund is to be mainly applied.

ARMY MEDICAL DEPARTMENT.

NOTICES of the next examination of candidates for commissions in the Medical Department of Her Majesty's Army have appeared in our columns. The examination will be held on the 14th of February, 1876, and forty appointments are announced to be open to competition. The many and, as they seem to us, just complaints of army medical officers have been so fully and repeatedly set forth in our pages that it is simply a waste of time and space to discuss them further. That there is a very great amount of discontent in all grades of the medical service is undeniable. We hear it on all sides, and we do not hear of any attempt being made to remedy it. Mr. Gathorne Hardy has been interviewed by deputations of various kinds, questioned by members of the House of Commons, and the state of the departments was made the subject of a motion in the lower House, which was only withdrawn by Dr. Lush on the War Minister's declaration that the grievances of medical officers were engaging his most earnest attention. He has been frank enough in his apologies for the delay, but up to the present moment he has made no sign, and it is to be presumed that an expression of his intentions will only be yielded to Parliamentary pressure and the growing decadence of the service. Such are the facts, and the advertisement to which we have referred must be read by the light of these facts.

THE SMALL-POX AT KEIGHLEY.

THE writer of two very sensible letters in the *Leeds Mercury* on "Anti-vaccination Fanaticism" opportunely and forcibly draws attention to the fact reported by the Registrar-General of the great mortality from small-pox in Leeds and Keighley. Three or four millions of people in London just now are enjoying almost absolute immunity from death by small-pox—one of the most horrible modes of death. It is not so with the much smaller population of Yorkshire. They have had in the last quarter twenty-eight deaths from small-pox, of which twenty-five have occurred in Leeds and Keighley. It must delight the hearts of Mr. and Mrs. Hume Rothery to know that small-pox thrives at Keighley, for it is a part of the strange fanaticism of anti-vaccinationists to have as much kindly feeling to small-pox as they have horror at the very thought of vaccination. The Keighley Guardians have at last been compelled, strongly against their inclination, as we may suppose, to give way to superior authority. At a meeting of the Board on Wednesday a motion was carried, with but four dissentients, that the time had arrived when no further resistance to the writ of *mandamus* should be made by the members, but that they accept the decision of the Court of Queen's Bench. A further motion was then proposed that the vaccination officers of the union be instructed to produce their books at the next meeting, with a list of defaulters, with a view of carrying out the compulsory clauses of the Act. This was also carried, the chairman and two others only voting against it. We hope to see shortly a diminution of small-pox in Keighley.

THE UTERUS OF HARRIET LANE.

AT the meeting of the Obstetrical Society, held on Wednesday last, Dr. Alfred Meadows read a note containing a description of the uterus (supposed to be that of Harriet Lane), which was submitted to him for examination, and with reference to which he gave evidence at the trial of Henry Wainwright. It seems that the organ measured at the fundus one inch and three-quarters in width, the canal was two inches and a half in length, and the uterine walls of unusual thinness, one measuring rather less and the other rather more than a quarter of an inch in thickness. The os uteri had been injured and its character destroyed by post-mortem examination to such a degree as to render it impossible to discover its original condition. The inner surface of the organ presented a convex appearance, an appearance generally met with in the virgin, but not believed to exist in a uterus which has been gravid. From these characters Dr. Meadows thought it impossible to form a positive opinion with regard to the existence of a previous pregnancy, though he was inclined to the opinion that the organ was nulli-

parous. Owing to the scientific as well as public interest of the point in question, the discussion of the paper was postponed until the next meeting of the Society, to be held in January.

RESEARCHES ON MECONIUM.

ZWEIFEL (*Archiv für Gynacol.*, Band viii.) has recently investigated the contents of the large intestine in stillborn children, and has made the interesting observation that they contain hæmatoidin-crystals, which present the characteristic reaction described by Gmelin—namely, that the chloroform extract when evaporated yields bilirubin crystals. The crystals of hæmatoidin and other morphological constituents of meconium are no longer discoverable in the yellow evacuations. The chemical constituents found in meconium are biliverdin, bilirubin, the biliary acids, cholesterin, mucin, traces of formic and other volatile as well as some non-volatile fatty acids. No grape sugar, glycogen, paralbumen, leucin, tyrosin, albumin, peptone, nor lactic acid could be found. The amount of water in meconium was 80 per cent.; the ashes formed 1 per cent.; the fatty constituents 0·772 per cent.; and the cholesterin 0·797. Examination of the ashes showed, in contrast with the fæces of adults, a high proportion of sulphuric and a small proportion of phosphoric acid.

THE FREE MEDICAL SCHOLARSHIPS OF EPSOM COLLEGE.

THE acting treasurer of the fund designed to establish these free scholarships, which are limited to the fifty foundationers after they have matriculated in the first class, University of London, has been visiting Liverpool and Manchester with the object of bringing their claims before the profession and the public. Dr. Carr has, we understand, been well received and very successful in his mission both among medical men and the wealthier classes. We are acquainted with few objects which have stronger claims on the truly charitable than these free scholarships, which give a helping hand to the orphan in order that in due time he may provide for himself. We would, therefore, hope that all who are able to contribute should lose no time in doing so, in order that the fund, still wanting £2000, may be completed.

DELIGATION OF THE CAROTID ARTERY FOR NEURALGIA OF THE FACE.

AT the annual meeting of the doctors of Grätz, Dr. Patruban read a paper on this operation, in which he offered no theory as to the mode in which it acts, but grounded his defence of the operative measure on the results obtained. He proposes to operate in this manner when all other means have failed, and the patient insists upon relief at any cost. He himself had tied the carotid artery under these circumstances thirteen times, and had never noticed any of the symptoms mentioned as often occurring, such as cerebral congestion, vertigo, double vision, squinting, &c. The idea of the operator had been gained by the relief obtained, in some cases, by simple pressure of the carotid. The author added that no accidents need be feared if the operation is well done.

IT has probably struck some of our readers, who are or have been in one of the services, that it would be most desirable to offer medical officers of the army and navy greater incentives to prosecute original work. There are honourable exceptions on land and on sea, but it must be admitted that the ruck of surgeons in both services, after admission, settle down into a somewhat somnolent performance of the actual duties demanded of them, and interest themselves but little in the progress of medicine and surgery. Many who perhaps consider that there is little inducement to work at present would, we have no doubt, be stimulated into exertion by the prospect of adequate rewards. We are led to make these observations by the recent announcement of the award of the Gilbert Blane gold medals. These prizes founded by the late Sir Gilbert Blane, Bart., were this year bestowed on Fleet-Surgeon T. J. Haran, for his Journal of H.M.S. *Glasgow* in 1874, and Fleet-Surgeon R. Eustace, for his Journal as Staff Surgeon of H.M.S. *Himalaya* for 1873. In accordance with the bequest of the founder, the medals are given by the joint concurrence of the Director General of the Medical Department of the Navy, and of the Presidents of the Royal College of Physicians and the Royal College of Surgeons.

AT the late meeting of the Social Science Congress at Brighton a paper was contributed to the Public Heath Department by Mrs. M. A. Baines on "Some Unsuspected Sources of Infectious Diseases," which is now published in the form of a pamphlet. Mrs. Baines is a prominent lady sanitarian, whose facile pen has for some years been devoted to the cause of domestic sanitation. Her last contribution, which evinces considerable acquaintance with some of the conditions by which disease is generated, brings especially under notice those frequently unheeded evils, pig-tubs and dustheaps. Mrs. Baines also sensibly and opportunely points out the danger which may be incurred by sending clothes to be washed at the homes of the very poor, where the presence of disease is the rule rather than the exception, and expresses her opinion that laundries should be subjected to sanitary supervision. Ladies desirous to find a "mission" may with advantage peruse Mrs. Baines's works.

THE introductory lecture in connexion with the commencement of the session of the Rotundo Lying-in Hospital, Dublin, was delivered last week by Dr. Lombe Atthill. After dilating on the great facilities of obtaining a thorough knowledge of obstetrics enjoyed by the students of the institution, the lecturer compared the short period of six months, which is deemed sufficient in which to study not midwifery alone, but also the nature, symptoms, and treatment of the large and complex class of diseases which are peculiar to females, with the three years ordained for the clinical study of medicine and surgery, and contended that it would require unremitting attention on their part to attain even a moderate proficiency in that short time. "The mass of students," said Dr. Atthill, "go forth into practice absolutely ignorant of these subjects—i. e., diseases of women,—and lamentable results consequently follow."

AT a General Council of the University of St. Andrews on the 26th ult. Dr. B. W. Richardson was elected assessor, the office having become vacant by the resignation of Mr. Patrick Anderson. We congratulate the University on the election. Dr. Richardson is not only a distinguished physician and *savant*, but is conversant with Parliamentary business—an acquisition decidedly necessary to the exercise of the office. At the same meeting a desire to introduce certain innovations was manifested, and a resolution to appoint a committee to consider the expediency of obtaining entrance examinations in connexion with the University was unanimously carried.

THE recognition by the Glasgow University of the teachers of the Andersonian has been persistently urged for some time past. We are glad to find that, at a recent meeting of the Glasgow University Court, it was resolved to recognise the lectures on Surgery delivered by Dr. James Dunlop in Anderson's University as qualifying for graduation.

DR. TAAFFE, medical officer of health for Brighton, has just issued a report of the health of the town during the last quarter. The annual death-rate in the period was 18·7 per 1000 of the estimated population. The mortality of children under five years old was 42·2 per cent. of the whole deaths. Of 61 infants who died of diarrhœa it was ascertained, by a special inquiry into the methods of feeding which had obtained, that 11 only had been nursed by the mother. The rest were fed by the various artificial foods, such as arrowroot, corn flour, condensed milk, &c. It is pretty clear that an immense amount of infantile fatality in this country is due to improper feeding and inadequate nursing. Dr. Taaffe gives some interesting details of a special house-to-house inspection which was made. It was found that in a great number of houses the interiors were connected, directly or indirectly, with the drains and sewers. No less than 420 of the best class of houses proved to be so defective. In 469 instances the house and closet were supplied from the same cistern with water, while in 173 houses the closet had no regular water-supply at all. These revelations must cause surprise, and cannot but injure the reputation of Brighton.

ACCORDING to a military contemporary, enteric fever has recently prevailed in the 1st battalion of the 12th Foot at Kinsale. We understand that the outbreak in question was of a sudden and severe character, the greater number of cases of the disease having made their appearance within a comparatively limited period. The insanitary state of the barracks is blamed for the outbreak. The troops were at first placed under canvas, but have since been removed to Cork. Several of the cases proved fatal, but the disease has now ceased.

A ST. PETERSBURG paper informs its readers that during the past year 171 pupils received instruction in the Female Medical College established in the capital of the Russias. Of these 102 are noble, 17 are daughters of merchants, and 12 of clergymen, the remaining 24 belonging to other classes of society. It would appear that the young ladies are extremely diligent in the pursuit of knowledge, and in especial display a marked predilection for dissecting-room work.

MR. ROBERT MCDONNELL, F.R.S., surgeon to Dr. Steevens' Hospital, has announced his intention of being a candidate for the Vice-Presidency of the Royal College of Surgeons in Ireland at the next vacancy in June. Mr. McDonnell is well known, not only as a skilful surgeon, but also as a physiologist of no ordinary attainments. Mr. Ledwich's name has also been mentioned as a probable candidate, but we believe we are correct in stating that the announcement is premature.

WE have received a copy of the seventh series of *Vanity Fair* portraits, which fully maintain the reputation created by the previous editions of the albums. Their scope is now pretty well known. We observe that Sir W. W. Gull, Bart., Mr. Lyon Playfair, M.P., and Mr. W. H. Russell of *The Times*, have places in the present series.

MRS. MORISON, widow of Mr. Alexander Morison, of Bognie and Mountblairy, has carried out his expressed wishes by erecting and completely furnishing a Cottage Infirmary at Forgue, Aberdeenshire, at a cost of nearly £2000, and endowing it with £2000.

DR. J. C. BUCKNILL has resigned his appointment of Visitor in Lunacy. The salary of the vacant office is £1500 a year with travelling expenses.

THE Lords of the Admiralty have placed H.M.S. *Clio* at the disposal of the authorities of the *Cornwall* school-ship, and she will in a few days be brought round to Gravesend, and take on board all the healthy boys. They will remain on her probably for some weeks, as the future of the *Cornwall* is still undecided. The patients at the Seamen's Hospital, as well as those on board the Corporation's hospital-ship *Rhin*, are, with two exceptions, all progressing favourably.

MESSRS. SAMPSON LOW AND CO. have now issued Vol. V. of Ziemssen's "Cyclopædia of Medicine." No sequence is preserved in the issue of the volumes, as Vol. IV. has not yet appeared, while the last volume was the tenth. This, however, does not detract from their intrinsic value, or from the admirable manner in which the publishers have done their work.

WE made a slight inadvertence in stating last week that Dr. Sedgwick Saunders had been placed on the Commission of Lieutenancy for the City of London. We were misled by a newspaper paragraph. Dr. Sedgwick Saunders has been a Commissioner since 1868.

REPORT
OF
The Lancet Commission
ON
LUNATIC ASYLUMS.

THE purposes of the present inquiry are:—

To ascertain the general character and efficiency of the provisions made for the Insane in ASYLUMS, and the conditions of their daily life;

To discover the measures, and, as far as may be possible, to formulate the system, of TREATMENT adopted for the cure of remediable, or recent, and the relief of incurable, or chronic, cases;

To collect and collate statistics of cases occurring within the last ten years, at the asylums visited, with a view to estimate the RESULTS.

It is believed that such an inquiry will help to furnish the profession with the much-needed data for personal opinion on many urgent questions, relating to the treatment, in public and special institutions, of patients labouring under the various forms of mental disease. It should also contribute to the sum of evidence required to determine moot points with respect to the diverse methods of treating insanity. And it may do some service by exposing, and thereby tending to the removal of evils and the redress of grievances affecting the insane, if any should be found to exist.

The inspection will be conducted with the approval, and it is hoped the co-operation, of the medical superintendents and officers of asylums.

The area of the inquiry, and the number of asylums visited, will be determined by the results obtained, and the extent to which responsible managers of these establishments may be found willing to submit their arrangements to the scrutiny it is desired to institute.

The exigencies of space for publication will necessarily limit descriptive detail in the reports presented, but no point of moment or interest will be overlooked in the inspection, and the general results will be given as concisely as possible.

No special order will be observed in the sequence of Reports, but the same general arrangements of topics will be followed as closely as may be convenient in each statement.

BROOKWOOD ASYLUM.

THE HOUSE AND ARRANGEMENTS.

This is the second asylum for the county of Surrey. It was opened on June 17th, 1867, to meet the pressing need of fresh cases which could not be received at Wandsworth. It is much to be regretted that, being provided with all the most approved appliances, Brookwood was not jealously kept to its true purpose as a hospital for the cure of new cases, instead of being at once crowded with chronic cases removed from other asylums and licensed houses. This economic blunder is now visited on the county by an urgent demand for a third asylum; a need which will crop up about every seven years, at the present rate of increase of insanity in Surrey, unless the policy is changed. In design and construction the establishment evinces considerable care. It is the boast of Her Majesty's justices for the county that the architect visited the best asylums in England and France before preparing his plans, and that this course was pursued "for the first time in England." The result is a series of buildings of by no means repulsive aspect, pleasantly situated on an elevated site about one mile from Brookwood, and three miles from Woking station, on the South-Western Railway, in the parish of Woking. The asylum, as it exists to-day, is composed of the original blocks, to which additions have from time to time been made, and some new and very superior buildings which have only just been completed. The story of the first construction has for its moral the economic wisdom of appointing the medical superintendent of an asylum in time to secure the advantage of his practical experience in aid of the architect. It was not long before the superintendent of Brookwood discovered defects and deficiencies in the edifice which it became his object to remedy. For example, the common error of limiting the accommodation so that an almost immediate increase becomes necessary, and that of forgetting the requirement of proportionally larger space on the female side of such an institution, were committed in the construction of this asylum. The advice of an experienced superintendent would have prevented these mistakes, and others equally unaccountable. The area of room allotted for day use was inadequate, only 19 superficial feet per head, inclusive of epileptics, all told—or 24 feet inclusive of corridors and passages—instead of 35 or 40, being available for the purpose. This deficiency was pointed out in the earliest report of the superintendent. But the faults of arrangement at the outset were not due to parsimony on the part of the county authorities, and they have been compensated by spirited and wise liberality in the subsequent conduct of affairs. The original aim seems to have been to give the asylum a thoroughly domestic character, and in this its designers were successful, perhaps too much so, as in the construction of dormitories allowing only 550 cubic feet of air for each patient. The old buildings are throughout not sufficiently commodious. The ceilings are too low, the corridors narrow, the staircases tortuous, and the whole constructionally cold and comfortless. By dint of building out, adding bay windows, and opening arched communications—where the safety of party walls would admit—from the wards into adjacent corridors, the superficial space has been raised from 19 to 39 feet per patient; and with the aid of wall-paper, colour, and floor-cloth, the interior has been made to assume a bright and cheerful aspect, exceedingly creditable to the ingenuity by which overwhelming difficulties have been overcome. The new buildings are incomparably better, not less homely, and, including the furniture, which has for the most part been made in the asylum, not more costly than the old. Indeed, they leave little to be desired as a healthful and appropriate residence for the insane.

The visitor to Brookwood will be strongly impressed by its simple and homely characteristics. There is nothing prison-like or Poor-law-stricken in the exterior. No high walls, massive casements, gloomy iron bars, or other tokens of restraint, inspire repugnance. The place looks like a cheery hamlet of almshouses, with its winding paths, undulating pleasure-grounds, well-planted shrubberies, and picturesque detached chapel, to which the inmates repair for service every Sunday, with all the charm of rural "church-going." Within, the institution wears an air of quiet repose and cheerfulness. The day-rooms are fitted with plain and convenient furniture, embellished with stands of flowers, plants, and aviaries, and provided with pianos, bagatelle-boards, cards, dominoes, draughts, books, and pictures. The walls are decorated with coloured prints, in cheap but elegant frames; and the apartments are so arranged as to produce a most agreeable impression on the mind of a stranger, with doubtless a corresponding influence on the residents. The patients, when not in the grounds or work-rooms, sit about among the plants or at the little tables, in groups or alone, as the mood takes them, contented and enjoying as high a sense of liberty and pleasure in life as their cases admit. The melancholic are less depressed, and the turbulent less excited, for the interesting and genial associations with which they are provided. The surrounding objects divert, as far as possible, the mind of the patient from that brooding self-consciousness which constitutes one of the most formidable obstacles to recovery in curable cases, and the severest sorrow of the confirmed lunatic's dreary existence. The fireplaces are open, like those of ordinary houses, and not fenced off with grim guards suggestive of mischief. The chimney-pieces are prettily decorated with inexpensive ornaments, and the pictures on the walls are hung within reach of the patients, but scarcely anything has been injured or disturbed. The policy has been to place the inmates of Brookwood Asylum as nearly as may be amidst the surroundings of sane life, and then to treat them as children under a perpetual personal guardianship. They are neither provoked by obtrusive prohibitions, harassed and incited to mischief by that suggestive sort of protectorship which the disordered intellect always distorts into an ever-present temptation to wrong-doing, nor left dependent for immunity from accident upon mechanical safeguards. Attendants have no excuse for neglect of constant supervision, because there are no appliancesupon which they can rely in the abstinence from duty. They *must* watch, and, recognising the impossibility of shirking personal responsibility, their task is habitually performed and becomes easy. It must not, however, be supposed that any requisite precautions against peril are omitted. From the locks on window-frames to prevent their being thrown up to a dangerous height, to an ingenious arrangement by which a continuous rush of water is made to denote the presence of any patient in a water-closet, we found all known and many novel contrivances for the safety of the inmates provided, and, which is equally important, kept in working order. The dormitories are so arranged as to give the attendants on duty efficient command of the beds. They can see and hear all that is going on. The rooms are lighted, for the most part, by gas-jets outside the apartments and showing through panes of glass. The bedsteads are of birch, in preference to iron, fitted with battens—except for the epileptics, who are laid on webbing,—and in all cases supplied with a hair mattress and straw palliasse. Great care has been taken in the construction of the furniture, and it would be difficult for an epileptic or suicidal patient to fall into danger. Every ward is amply provided with requisites for the inmates. The arrangements for washing and dressing are commodious, and comfort is considered, down to the detail of placing a bottle of filtered water for drinking for each dormitory. It would be better if the bottles were replaced by small filters. It is in minor matters like this that the efficiency of management most clearly expresses itself.

The provisions for recreation are very considerable. The airing courts are tastefully laid out, with especial regard to pleasure and safety. Instead of the regulation walks and formal grass plots, each court is a garden. Sun-shades, arbours, grounds for croquet and other games, tell of the wisdom no less than the sympathy with which all has been planned. A large recreation hall has been provided, in response to the request of the medical superintendent, with every convenience for theatrical and other entertainments, and it is seated with benches of admirable construction, made in the asylum. There is a well-arranged cottage hospital, wholly detached from the main building, and with all its offices self-contained. This, also, is a recent addition. It will be used as a residence for convalescent cases which it is desirable to separate from the general body of the patients, in times of health, and applied to its special purpose in case of need. The ordinary infirmary wards are well situated and appointed; and with special forethought a detached mortuary, with post-mortem room and all conveniences, has been erected in an obscure part

of the grounds, approached from the main buildings by a masked path. This is an excellent feature. The asylum generally is well ventilated by wall-shafts in the wards and in the single rooms, which are sufficiently though not very numerous and suitably furnished. A perforated plate near the floor admits cool air, and is protected with sliding shutters. An opening just below the ceiling allows the egress of foul air. There are no "strong" or padded rooms in the institution. The system of treatment adopted does not recognise or require such appliances; but of this we shall speak presently.

The boundary path of the asylum provides a walk of nearly three miles within the grounds, and the use of sunk walls instead of high fences secures the great advantage of an unbroken view from every point. The prospect is interesting and extensive. The Mid-Surrey hills, the Frimley ridges, and the Basingstoke canal which bounds the estate on the south, are pleasing objects in the landscape. Much of the ground on which the buildings stand has been made by transfer of materials, and considerable skill has been evinced in landscape-gardening and general culture. The Bagshot sands, with gravel and clay, underlie a thin and poor soil, which, however, has been greatly enriched by utilising the sewage of the asylum. The farm is well managed, and of great value to the establishment, both as supplying healthful occupation to a large class of male patients and on account of its produce. The residences of the medical superintendent, the chaplain, the farm bailiff, and the gardener are detached. The two latter have been adapted for the reception of a limited number of patients draughted from the principal buildings, and forming little working communities, under especially sociable influences which are highly appreciated and of great value to the cases so disposed. The water-supply has from the outset constituted a great difficulty. The quantity has been eked out by drawing from the adjacent canal. Every precaution has been taken to ensure purity by filtration, and repeated analyses by competent referees show that the quality has been fairly good; but the source is wholly *surface-water*, and we are glad to be assured that measures will shortly be taken to obtain a better supply by sinking an artesian well. This will need to be carried to a considerable depth—we fancy greater than the experts consulted estimate,—and the works must be proportionately expensive; but the need admits of no palliation, and will not tolerate further delay. The sewage, as we have stated, is "utilised," and the drainage appears satisfactory. The original arrangements were obviously defective, but very much has been done to improve matters; and, under the present management, there is little doubt that the necessity for amendments, being clearly recognised, will be fully met.

The daily life of the patients is well ordered. The time is filled up without being excessively burdened with engagements. There is neither the measured haste of an oppressive industrial *régime*, nor the monotony of prison discipline. A kindly and sympathetic intelligence seems to hold the reins of government in perpetual control, and its modifying influence is apparent at every point of the system. The feeble and infirm patients are not ruthlessly routed from their beds, while those who would drift into habitual inertia are judiciously urged to activity by encouragement and example, instead of being irritated and coerced. Those who have witnessed the results of a dissimilar practice at some asylums will not fail to recognise how much the substitution of this more considerate method involves and implies. The service of the attendants is as orderly and effective as a well devised system of checks and counter-checks can make it. The remarkably small number of "wet" and "dirty" cases reported, observed by the Commissioners in Lunacy from time to time, or recorded in the books, which we were allowed to inspect, speaks well for the attendance. The number of patients "raised" bears significant proportions to the instances of misadventure. The personal responsibility of the officials is clearly well enforced, and the principle of minimising safeguards and appliances, which too commonly prove excuses for neglect or carelessness, is in large measure successful, and productive of watchfulness and diligence. The patients are suitably clothed, but the depressing effect of a uniform, especially marked in the case of females, is wisely avoided. The dietary is sufficient and well varied. It includes a liberal supply of vegetables and fruit. An occasional fish dinner has recently been added, and one of Australian meat, admirably prepared, is greatly relished. Patients are carefully weighed every month, and the results recorded, so that any failure of nutrition requiring a change of food is promptly detected. The allowance of extras is governed solely by the needs of the special case for which they are prescribed. The arrangements for the health and comfort of the inmates may be fairly summed-up in the language of one of the medical reports: Brookwood Asylum is a hospital for the cure of curable cases, not a huge depôt for chronic cases. The efficiency of the ordinary medical superintendence was seriously and suddenly tested by an outbreak of small-pox in 1871. The expedition with which the epidemic was stamped out proved the completeness of the sanitary system and the vigour of the staff. The provisions against risk from fire, always of the greatest importance in an institution of this class, are respectable. Hydrants are placed on all the principal floors and levels, and connected with a large tank at the summit of a tower. This was not as well filled *as it ought always to be* when we visited the asylum; but the point is not overlooked. There is a fire-engine and a fire-escape in an out-house, and a corps of firemen has been organised under the command of the engineer of the asylum, and is regularly drilled. A periodic inspection by Captain Shaw would be of service. We commend the suggestion to the Visiting Committee. The cost of patients is now only ten shillings and sixpence a week per head, inclusive of all charges and expenditure. We come next to the

TREATMENT.

"Insanity is so essentially a disease of debility," remarked the medical superintendent, in his first annual report (1868), "that, as a necessary starting-point to its successful treatment, a good and generous diet is required." This, as we have stated above, is provided. The general discipline is equally satisfactory. Courtesy, patience, thoughtfulness, watchfulness, truthfulness, and sympathy are the virtues expected and required from officials in their daily dealings with the sane; and the cultivation of these qualities is enforced by an admirable code of rules of conduct, which every attendant is obliged to study and obey. Great care is exercised in the appointment of suitable attendants for the wards—1 to 10·5 patients on the male side, and 1 to 12·6 on the female. As far as we can judge from appearances, and from the condition of the wards, which commonly affords a fair indication, the service is fairly satisfactory. This impression is confirmed by careful examination of the Commissioners' reports, and by the measures taken in cases where the attendants have failed in their duty. A wise discretion has been shown in choosing persons who have not previously been engaged at other asylums, where they may have picked up, not only "experience in the *management* of the insane"—at best a very equivocal qualification,—but acquired habits of expertness in the evasion of rules and perfunctory performance of the duties required of them, with a facile skill in deceiving those in authority over them and shifting the obligations of direct responsibility. A very complete and apparently effective system of registers and reports is in force, and, if fully carried out, the details, symptoms, and behaviour of each case must be brought under the cognisance of the medical officers. We are assured that this system is tested at all points and checked by observation, and the demeanour of the patients certainly conveys the impression that they live as orderly, healthful, and pleasant lives as their condition admits. The fundamental principle would seem to be to place every patient as much at ease as his or her state will allow, and to obviate the feeling of restraint at the same time that provocation to displays of temper and excitement are carefully avoided. The physical condition of each patient on reception is minutely examined and noted. In the case of every person sent in from a workhouse, a special statement of the condition in which he reaches the asylum is forwarded to the local board of guardians. Since this procedure has been adopted, a marked improvement in the method of removal and in the state of such patients has been observed. The bodily health of a patient is the object of primary care. As regards the general method of treatment, the following passage, which we extract from the report of the medical superintendent at the close of 1874, is significant:—

"Mechanical restraint has not been employed since the

opening of the asylum, and there has been no instance of seclusion since the year 1870."

Previous to 1870, "seclusion"—i. e., placing a patient in a room alone, and locking or otherwise securing the door—was adopted in seventy *instances*, distributed over sixteen *cases*. For example, in 1867 there was a case of puerperal mania of unusual severity. Opium had been largely administered before admission. The patient was secluded for short periods thirty-six times. Eight other cases during the same year were secluded, in all, thirteen times. The asylum was opened on the 17th of June, and to the 31st of December—

in 1867 there were	9	cases, comprising	49	instances.
„ 1868	„	3	„	„	15	„
„ 1869	„	2	„	„	4	„
„ 1870	„	2	„	„	2	„
		16			70	

The Report of the Commissioners in Lunacy, dated June 17th, 1870, contains a significant paragraph:—

"Upon this subject (seclusion) Dr. Brushfield states, as the result of his experience and observation, that special care and treatment in the open wards is preferable in all cases of violent excitement to seclusion. He is strongly of opinion, that not only is the benefit to the patient thereby promoted, but the effect is to ensure vigilance and the more efficient performance of their duties on the part of the attendants."

The circumstances, that the asylum was a new one undergoing continual alterations, and that the staff of attendants was scarcely in working order, together with the exceptional severity of some of the cases occurring before 1870, must count for much in the explanation why the medical superintendent did not earlier act on his personal convictions. We do not understand from Dr. Brushfield that he entirely abandons "seclusion" as a method of treating excitement; but the cases in which it might, in his opinion, be of use are so seldom met with that shutting a patient up alone to play out his passion in a padded room, or to "calm down" his excitement in solitude with nothing but the demon of his own disease by way of companionship, is practically eliminated from the system of treatment. Next to the folly of attempting to overcome violence by violence, so forcibly exposed by Dr. Conolly years ago, or of seeking to dispel deceptive persuasions by deceit, this trouble-saving artifice of seclusion is conspicuously irrational, and might well be wholly discountenanced. The method now adopted with particularly excited cases at Brookwood is to place the patient in a single room, of small size but in no other way peculiar; to tell off one, two, or, if necessary, more attendants for the special duty of quieting and, with moral influences, protecting and controlling him; and then gradually withdraw the demonstration of strength as the excitement subsides, until a single attendant sitting outside the room with the door open will suffice for effectual guardianship. Scarcely any cases so controlled call for physical force, and, when indispensable, it is employed without mechanical appliances, and with studious calmness and moderation. All pressure on the chest and body is peremptorily interdicted. During our visit we had the opportunity of seeing a woman of violent temperament and in considerable excitement so treated. In a padded room she would have been furious. We have known less turbulence produce wild havoc in a chamber elaborately padded from floor to ceiling. In this instance the patient walked about good-temperedly, leaving and re-entering her room at pleasure, always closely, but not unpleasantly, attended by the official on duty, and was quite content to vent her impulses in an occasional outburst of vehement chattering or loud singing. In the absence of anything to exasperate the emotions, or to quarrel with, her excitement was kept at its lowest point, and therefore incomparably less injurious to the brain and morbid will, and much more easily restrained by suasive influences. A less boisterous case was stamping with harmless energy in an open ward, and evidently passing through a paroxysm under the watchful eyes of attendants and the amused gaze of quiet inmates, many degrees below the fever-heat of conventionally restrained madness.

What may perhaps be designated the negative treatment of insanity is wholly of this class at Brookwood. Everything is so ordered as to tone down excitement and spare strength. Exhaustion is never desired, much less courted, or even intentionally brought about by the measures adopted, with a view to reduce the more formidable and troublesome symptoms of mania. There are no punishments properly so called. The shower-bath is *never*, we are assured, under any circumstances, employed as a measure of discipline. When required for physical treatment, it is especially explained to the patient that the reason of its use is purely medical, and he is generally induced to enter the bath himself and pull the valve-string "for his own benefit." The only correctionary discipline takes the form of a deprivation of some privilege or enjoyment not essential to health, and this can never be administered except by direct personal order of the medical officer. The attendants have no "power," and nothing is left to their discretion.

The positive remedial treatment is essentially moral and mental. Patients are provided with suitable and interesting employment, and sedulously diverted from their own broodings phantasies. The out-door labour and the works carried on within the asylum are so arranged as to afford a varied source of interest. The patients are allowed to work *with* the attendants, not to perform a task *under* their surveillance. It was difficult, in many cases impossible, to tell which were the attendants and which the patients, so cheerfully did the two classes work in companionship. More purely diverting appliances, such as stage-plays, concerts, conjuring *séances*, panoramas, balls, illustrated lectures, and exhibitions of divers kinds, are employed, systematically and at short intervals, as means of taking the mind out of itself and leading it back to normal trains of thought and methods of thinking, through new channels. The asylum band, composed of the attendants and officials, numbers sixteen. Neither pains nor expense are spared to perfect this valuable repertory of mental remedies. No means of reaching and swaying the mind are neglected. The patients are never left without restorative and healthful agents at work around and upon them; and it is by the continuous operation of such constraining and persuasive mental influences that the cure of curable cases is sought to be effected. Of course the chronic cases, and those complicated with epilepsy and general paralysis, are not susceptible of remedy by mental treatment, if at all; but even in these deplorable instances much is gained by the ameliorating though transient influences exerted. This, however, brings us to the consideration of

RESULTS.

The subjoined table will serve to place the medical statistics of Brookwood Asylum, from the date of its opening to the end of 1874, conveniently before the reader. It may be premised that with the additional accommodation afforded by the new buildings just completed, the institution will be able to house 1060 patients, instead of 633—the largest average number resident any year during the period to which these returns relate.

The summary is reproduced, with modifications, from the returns required by the Commissioners. Additional particulars embodied in the fifth column have been obligingly supplied by the medical superintendent from the case-books. The first point that calls for comment is the very small proportion—26·49 per cent.—which the "curable" cases bear to the total number of admissions. This is most unfortunate. As far back as 1871 Dr. Brushfield called attention to the disadvantage of allowing a "hospital for the proper medical treatment of recoverable cases" to "assume more the character of a hospital for incurables." The appropriation of special establishments for chronic cases, under the control of the Commissioners in Lunacy—not, as is the case with some of the asylums professedly set apart for that purpose, under the Local Government Board, and classed as *workhouses*,—is an expedient which cannot long be delayed. The very extraordinary course pursued with regard to ex-criminals, who are now discharged from the criminal asylums into the county houses, to the serious detriment of the latter, increases the urgent need of reform in this direction. What we have to say on this point will, however, come better at the close of our remarks, when the facts are all before the public. The small proportion of curable cases is due to the large number of general-paralytics and epileptics at Brookwood, a circumstance especially to be regretted when the efficiency of the institution as a hospital is considered. The proportion of cures to curable cases —65·39 per cent.—which constitutes the best measure of suc-

cess, is satisfactory. The percentage of deaths on the average number resident is by no means high, but must be further qualified by the number of deaths whose immediate cause was general paralysis. This incurable malady accounts for 31·4 of the total mortality, or 140 out of 451 deaths in all, from the opening of the asylum on June 17th, 1867, to Dec. 31st, 1874; which gives a gross proportion of deaths of 29·94 on the total number of admissions—1740—for the same period. The percentage of "recoveries" on total admissions is 28·06. But the percentage of cures upon "admissions" affords no useful indication as to the results of treatment. Obviously the outcome must depend upon the kind of cases

Surrey County Lunatic Asylum at Brookwood.

Year.	Cases admitted.				Cases discharged.				Cases remaining on Dec. 31st.		Average number resident.	Analysis of recoveries.				Analysis of deaths.						Casualties reported.
	Total number.	Transferred from other asylums.	Readmitted.	Deemed curable.	Recovered.	Relieved.	Not improved.	Died.	Total number.	Deemed curable.		Proportion per cent. on admissions.	Proportion per cent. on cases deemed curable.†	Proportion per cent. on average number resident.	Number, within six months of admission.	Proportion per cent. on total of admissions.	Proportion per cent. on average number resident.	Immediate cause: General Paralysis.	Average age at death.	Number, within six months of admission.	By suicide or accident.	
1865	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	328	245	1	31	10	...	2	9	307	...	173	3·04	32·25	5·78	10	2·74	5·19	2	...	8	...	...
1868	342	112	9	75	62	9	9	51	518	40	442	18·1	82·06	14·02	50	14·91	11·5	9	49·7	33	1	...
1869	226	50	7	53	56	5	7	56	620	37	546	24·7	60·21	10·25	28	24·77	10·25	15	49·	25	1	...
1870	186	15	11	57	63	2	21	83	637	27	640	33·8	67·2	9·84	32	44·62	12·9	24	49·84	30	...	...
1871	180	41	11	48	41	7	64	77	628	22	633	22·7	54·66	6·47	24	42·77	12·1	24	53·5	21	1	2‡
1872	135	6	14	49	65	4	10	50	634	19	631	48·14	91·54	10·3	32	37·03	7·92	14	48·6	17	1	1
1873	166	73	9	65	44	10	54	57	635	19	643	26·5	52·38	6·84	28	34·33	8·87	26	45·5	19	2	...
1874	177	12	11	83	84	6	9	68	645	37	645	47·5	82·25	13·0	62	38·41	10·5	26	51·45	26	...	...
...	1740	563	73	461	425	43	176	451	...	...	544	28·06	65·39	...	266	29·94	...	140	...	179	6	3

* This asylum was not opened until June 17th, 1867.
† This percentage is upon the total of "curable" cases remaining on Dec. 31st of the previous year (11th col.) and those admitted during the current year (5th col.)
‡ These were patients bitten by adders in the grounds.

admitted, and mere numbers show nothing to the point. Calculating the percentage of cures upon cases "deemed curable" supplies a better inference. Although medical superintendents differ widely as to the cases they deem hopeful, each asylum is tested upon the basis of its own prognosis. A comparison of the columns showing, respectively, the number of "recoveries" and "deaths" within six months of admission will enforce the expediency of dealing with *recent* cases apart and promptly, for these only are "hopeful." It will be seen that the prognosis of curable cases at Brookwood at the close of the year 1874 gave only 37 as hopeful. We reserve general remarks until the state of our inquiry renders it possible to compare the results obtained at other asylums. Our warm acknowledgments are due to the great courtesy and frankness of the excellent medical superintendent, Dr. T. N. Brushfield, and his assistant medical officer, Dr. James L. Barton.

SUPPLY OF SUBJECTS FOR DISSECTION.

LOUD complaints are made by almost all the teachers of anatomy in London of the scarcity of subjects for dissection. When, in 1871, Professor Humphry, of Cambridge, interested himself in securing some changes in the Anatomy Act of William IV., whereby the period within which the certificates of interment to be transmitted to the Inspector of Anatomy was extended from six weeks to a period not exceeding six months, it was thought that anatomical teachers would be able to collect and preserve bodies during the four months prior to the commencement of the winter session, and by that means obviate the difficulties that had been previously experienced from the want of bodies. Unfortunately the experience of the last three years has shown that the alteration has not been productive of as good results as were anticipated. A considerable difficulty has been felt in preserving bodies in a fit state for dissection for three or four months; but, as we showed in the Report on the Preservation of Bodies, in October, 1872, this difficulty may be overcome to a great extent, if only the Inspector of Anatomy could be encouraged to make an effort to supply an adequate number of bodies. It is an anomalous state of things that, in a community numbering over three millions and a half, anatomical study should be thwarted for the want of material. Thousands of unclaimed persons, whose bodies should be available for anatomical purposes, die in London every year. But the fact is that it seems to be no one's business in particular to look after the supply of subjects, and therefore the work is not done. The Inspector of Anatomy has clearly proved that it is no part of his duty, and the Poor-law officials are not always actuated by a desire to advance scientific pursuits. Those teachers who recollect the excellent administration of Sir Rutherford Alcock must sympathise with the teachers of anatomy of to-day. Although we have now entered upon the third month of the session there are in the large schools many first, and even second, year's students who have not been able to procure one part for dissection.

In reply to our inquiries, the teachers of anatomy in the metropolitan schools have kindly supplied us with the following information respecting the supply of subjects and the number of *bonâ fide* students in the anatomical classes:—

	Subjects.		Students.	
	Total.	Inspector of Anat. since Oct. 1st.	First year.	Total.
Guy's	28*	10	93	240
St. Bartholomew's	22†	6	108	225
University College	14	8	86	203
St. Thomas's	11	5	50	158
St. George's	9	5	43	83
King's College	6	3	32	80
Middlesex	5	4	38	72
London	12‡	10	35	71
Charing-cross	2	2	28	45
Westminster	4	1	12	26
	113	54	525	1203

* Eight post-mortem examinations had been held, so that only the limbs were available. Several were from the hospital, and four have been received this week. † Seven of these were from the Hospital.
‡ Two from the Hospital. This School is in a very populous district and a large parish.

There have been, therefore, from all sources, and including those preserved before the commencement of the session, 113 subjects supplied to ten metropolitan medical schools for the purposes of dissection this session, of which only 54 have been furnished by the Inspector since October 1st, while the total number of students desiring to dissect is 1203, of which 525 are first-year. It need scarcely be said that this supply is quite inadequate. As one body is generally allotted to six or seven students, we shall say seven, about 200 bodies should by this time have been supplied, because at this period of the session many students should have completed one part, and been far advanced in a second part, especially those students who are preparing for the January and April examinations.

It will be seen that we have not included St. Mary's in the above table. The reason of this is that we have not received a return from the lecturer on anatomy of that school. The main facts will not, however, be materially influenced by the omission of this school, which is, we hear, always kept well supplied with subjects.

Correspondence.

"Audi alteram partem."

ARMY SANITARY COMMISSION.

To the Editor of THE LANCET.

SIR,—On the 24th November I asked you to be good enough to insert a statement of facts regarding the work of the Army Sanitary Commission. This statement was directed against charges of incompetency brought against the Commission on account of certain remarks of theirs on reports referred to them from India, in which they had failed to discover evidence of the spread of cholera by water poisoning. I was not then in a position to state what views the Commission had actually expressed, because the papers had not been published. They have, however, since appeared, and I can now state exactly what the Commission did.

A severe epidemic of cholera broke out in 1872 in the North-west of India, and the Government of India directed special local inquiries to be made by medical officers of the British and Indian armies at affected stations. This led to the production of reports on 108 outbreaks at 44 stations, the notes of which appeared in the report of the Sanitary Commissioner with the Government of India, which came before the Army Sanitary Commission in the usual way. At the same time Dr. Cuningham laid before the Commission a series of questions on these reports. The replies to these questions were first drawn up, and then the remarks on the reports, and it happened that both documents were sent to the India Office on the same day; the questions giving the answer in detail, the remarks giving merely the result. Had both documents been printed together in last year's India Office Report, the case would have been evident enough, but the remarks were published in last year's report, and the replies have just been issued.

The following is Dr. Cuningham's question, together with the reply:—

"*Question*: Is there anything in the evidence given in my report to support the idea that cholera was spread by a specific poison drunk in water?—*Answer*: Without prejudging the results of more extended inquiry, and supposing that every obtainable information on this subject during the epidemic of 1872 has been recorded, the Committee has been unable to discover any evidence in support of the conveyance of cholera infection in drinking water."

You will see that this gives a very different aspect to the action of the Commission, and had the facts all been printed at the same time, the recent attacks on the Commission in this matter would have been superfluous. As the case stood, however, it must in fairness be confessed that the terse expression in the remarks, "there is no evidence to sustain a current theory that cholera poison conveyed in water is the cause of cholera," although intended to be read in the light of the reply, when taken by itself, and without the reserves in the reply, looks like a decision on the whole case on the evidence as it stood. The reply gives the exact position taken by the Commission in the discussion.

I might stop here, but it appears to be only an act of justice to the authorities in India to state that they did make further inquiries by sending copies of the reports to all the medical and other officers who had supplied the information originally, with a request that mistakes might be corrected and any additional information inserted.

The result, as stated by the Sanitary Commissioner with the Government in India, in his report for 1873, is that "no mistake on any important matter of fact has been brought to notice, nor has any additional information of value been furnished."

I am, Sir, yours, &c.,

London, Nov. 27th, 1875. JOHN SUTHERLAND, M.D.

EFFUSED BLOOD.

To the Editor of THE LANCET.

IN reference to some remarks of mine in a clinical lecture you published the other day, on the various modes in which effused blood may be disposed of, will you allow me to relate the following case? It illustrates what must be, I think, a very uncommon course of events.

Some months ago I removed an encysted tumour, about the size of a filbert, from over the parotid gland of a girl aged fourteen. No vessel needed a ligature, and the edges of the wound were, of course, brought accurately together, and covered with a pad of lint secured by a bandage. After forty-eight hours, when the pad was removed, the wound looked well. Its edges were in close contact, apparently united, and there was no sign of separation of its surfaces, or of any untoward disturbance. But in the course of the next day or two, although the pad was carefully replaced, the wound was gradually raised, and the adjacent parts distended, by an effusion beneath them, so that it then looked very much as if the tumour were still there. From the absence of all signs of inflammation or of any disturbance, I was sure that this could not be pus—that it must be either blood or serum. The child declared that there was no pain, nothing beyond a little stiffness. On the third or fourth day, to avoid the risk of leaving any pent-up fluid, I introduced, through the middle of the wound, which readily yielded, a very fine probe. The point moved freely in a cavity, but nothing whatever escaped, and when it was withdrawn the end was stained with blood. The swelling remained, showing for some days no sign of decrease, but there was no further local disturbance of any kind. At the end of nine or ten days the sense of fluctuation was still so marked that I again introduced the probe, but with only the same result. The wound throughout its length was quite united; it looked perfectly well, but the swelling persisted, and gradually the parts around the wound became discoloured, as if bruised. I could not doubt that there was a mass of blood, more or less coagulated, beneath it, and of course I was much interested to see what would become of it. Would it at length be discharged, provoking suppuration, or would it slowly shrink, becoming absorbed, or might part of it become organised? I mentioned the case and put the question to several friends, and the unanimous verdict was that sooner or later it must come out. But it never did. After remaining with very little change, save wider and deeper discolouration, for a fortnight, the swelling very slowly began to subside, the sense of fluctuation passed away, the surface resumed its natural colour and outline, and at the end of a month or thereabouts evidence of an operation could not have been slighter. Indeed, after some weeks longer the scar was singularly faint, and I fancied that the slender linear depression which one can usually detect had been counteracted by the temporary distension.

Who would not have watched the progress of this case with intense interest? I was anxious, too, for a time, for I feared that suppuration might occur and leave an ugly mark, and in the majority of cases blood so effused would undoubtedly be thus expelled; but in a healthy child, healthy blood, lying in a nest of healthy tissue, was disposed of very quietly and in the simplest way. It provoked no

mischief, and the little patient was never even conscious of its presence; and this although no special means were adopted to exclude germs, and I fear that I must, on more than one occasion, have introduced a few with my probe.

The atmosphere, however, must have had but limited, if any, access to this blood; for I have little doubt that before it was effused the lips of the wound had united; so that, although it was associated with a wound, it was really under the condition of blood extravasated in a bruise.

I am, Sir, yours truly,

Brook-street, W., Nov. 30th, 1875. WM. S. SAVORY.

AN IMPROVED SCARIFIER FOR INCISING DROPSICAL LEGS.

To the Editor of THE LANCET.

SIR,—Messrs. Matthews, the surgical instrument-makers, have lately made for me an improved spring scarifier for incising dropsical limbs. The instrument, a sketch of which is here given, is, in fact, a small cupping scarifier with a single blade. The blade is drawn back by a metal lever, and held by a catch until it is loosened by touching a brass knob. The length of the incision is about half an inch, and the depth is regulated by a screw which raises or lowers the brass cover through a slit in which the lancet makes its sweep.

The main advantage of this instrument consists in the fact that the incision, being made by the rapid sweep of the spring scarifier, is attended with much less pain than results from the slow incision with an ordinary lancet or from punctures made with needles. This instrument, with the semicircular sweep of its blade, is also preferable to one which I formerly used, in which the lancet was thrust straight forward by a spring. The incision made by the sword-like sweep of the one instrument is more rapid and less painful than the dagger-like thrust of the other. The instrument is so constructed that it can be easily opened for the purpose of cleaning the blade, which should be done immediately after its use.

I am, Sir, yours &c.,

Savile-row, Nov. 30th, 1875. GEORGE JOHNSON, M.D., F.R.S.

DEBATE ON MR. WELCH'S PAPER AT THE MEDICO-CHIRURGICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct in two particulars your able and otherwise very accurate report of my remarks in the above debate? I spoke in round numbers of 500 soldiers as being *annually* lost to the British service through diseases of the circulation. Of them 450 died or were discharged on account of heart disease, 50 on account of *aneurism*. In a later sentence I did not mean to imply that the *faintest* venereal excoriations were often recorded as syphilis, which would have been an exaggeration, but that they were recorded (contrasting in this respect with intemperance), and I then gave reasons for thinking that venereal sores were inaccurately classified, thus swelling the numbers of syphilis.

I am, Sir, yours faithfully,

R. DOUGLAS POWELL.

Henrietta-street, W., Nov. 30th, 1875.

BEQUESTS, &c., TO MEDICAL CHARITIES.—Mrs. Teresa Ann Carmichael, of St. Stephen's-square, Bayswater, bequeathed £300 to St. George's Hospital; £200 each to the Royal United Hospital, Bath, the Cancer Hospital, the National Hospital for Diseases of the Heart and Paralysis, King's College Hospital, and the Hospital for Sick Children; and £100 each to the General Hospital, Bath, and the Dental Hospital of London.

Medical News.

UNIVERSITY OF LONDON.—The following is a list of candidates who have passed the recent M.D. examination:

Crocker, Henry Radcliffe, B.S., University College.
Duncan, Andrew, King's College.
Eastes, Thomas, Guy's Hospital.
Philpot, Joseph Henry, King's College.
Sturge, William Allen, University College.
Yeo, Isaac Burney, King's College.

The following have passed the recent B.S. examination:—

FIRST DIVISION.

Hullard, Jean Arthur, B.Sc., University College.
May, Bennett, Birmingham General Hospital.
Maclean, Thomas Edwin, University College.

SECOND DIVISION.

Hobson, Lewis John, University College.
Jameson, Leander Starr, University College.
Rose, William, King's College.
Voelcker, George Henry, University College.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 25th:—

Fonmartin, Henry de, Lying-in Hospital, York-road.
Mahony, Laurence Francis, Amherst-road, Dalston.
Roberts, Gordon Money, Finchley-road.
Stephens, Meredith Lloyd, Belper, Derbyshire.

The following gentlemen passed the Primary Professional Examination on the same day:—

Ernest H. Buckell, University College; Daniel Colquhourn and Arthur Greenwood, Charing-cross Hospital; Frederick Alexander Hyne, Guy's Hospital; Eugenius A. Roche, St. Mary's Hospital.

HOSPITAL SUNDAY in Belfast has been permanently fixed for the last Sunday in each year.

A WOMAN named McEvoy died last week in the County Down, Ireland, at the advanced age of 106 years.

Deputy Surgeon-General Andrew A. Stoney, L.R.C.S.I., of Frankford, has been placed on the Commission of the Peace for King's County.

IN London last week 1504 deaths were registered, including 54 from measles, 120 from scarlet fever, 7 from diphtheria, 55 from whooping-cough, 25 from different forms of fever, and 14 from diarrhœa. No death from small-pox was recorded, making in all the nineteenth continuous week in which such a satisfactory announcement has been made. The deaths referred to diseases of the respiratory organs amounted to 374. The London Fever Hospital contained last Saturday 102 patients, including 85 cases of scarlet fever, and 12 of enteric fever.

RUMSEY TESTIMONIAL FUND.—Those desirous of subscribing to this fund are requested to do so at once, as the list will be closed before Christmas. Subscriptions may be forwarded to Dr. Buchanan, New Government Offices, Whitehall; to the Honorary Secretary; or to Messrs. Robarts, Lubbock, and Co., bankers. Cheques should be made payable to the "Rumsey Testimonial Fund" or bearer, and crossed "Robarts, Lubbock, and Co." Post-office Orders should be drawn on the Curzon-street Post-office, and forwarded to the Honorary Secretary.

THE SKIPTON GUARDIANS.—We are informed that only one candidate, and this one possessing but a single legal qualification, offered himself for election as medical officer to the Skipton Workhouse and Infirmary, at the salary of £35, which had been refused by the late medical officer under the circumstances mentioned in our issue of Nov. 13th. This candidate was elected, subject to the approval of the Local Government Board. We understand there are three or four doubly qualified practitioners in the town willing to take the appointment at a fair salary.

WHARFEDALE CONVALESCENT HOME, ILKLEY.—The committee of management of this institution has issued cards to the members of the medical profession announcing that the home will be opened for the reception of convalescents during the whole winter months, and that the arrangements for heating and ventilation are of such a nature as to ensure the most perfect warmth and comfort to the inmates. This determination has been arrived at through the strong wish of the founder, Mr. Charles Semon, to extend to others the benefits which can be obtained by richer people at kindred establishments.

THE first meeting of the Surgical Society of Ireland was held at the College of Surgeons on the 26th ult., the opening address being given by Mr. E. Hamilton, president of the society.

AT a meeting of the St. Pancras Vestry, held on Wednesday last, a letter was received from Dr. Thomas Stevenson, medical officer of health for the parish, tendering the resignation of his office, which he has held for a period of seven years, and stating as the chief cause of his doing so to be, "that while I am held responsible for the sanitary condition of the parish, I am denied that assistance in out-door inspection of houses, either visited with contagious diseases or habitually in an unsatisfactory condition, which I believe to be necessary. I feel that the severe condemnation which a house-to-house visitation of the poorer parts of the parish has received from a majority of the Sanitary Committee must of necessity hopelessly weaken my authority with the sanitary inspectors, and render nugatory my efforts to carry out the Sanitary Acts." The Vestry resolved to postpone the consideration of the letter until their next meeting, when some matters connected with the sanitary condition of the parish will also be considered.

Medical Appointments.

ABBOTT, C. E., M.R.C.S.E., has been appointed Surgeon to "The Atlas" Steam-ship, Cunard Line.

BARR, J., L.K.Q.C.P.I., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

BARLOW, T., M.D., M.R.C.P.L., has been selected as an Assistant-Physician to the Charing-cross Hospital, vice Poore, appointed an Assistant-Physician to University College Hospital.

BARTLET, G., M.R.C.S.E., has been appointed Medical Officer to the new Cottage Infirmary, Forgue, Aberdeenshire.

BENNETT, J. H., M.D., M.R.C.S.E., has been reappointed Medical Officer of Health for the Redcar Urban Sanitary District: £15 per annum.

BOAST, B. B., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Officer for the No. 3 District of the Henstead Union, Norfolk, vice Morgan, resigned.

CREMONINI, J., M.R.C.S.E., has been appointed Resident Medical Superintendent of the Hoxton House Lunatic Asylum, vice Hunt, deceased.

DALE, W., M.D., M.R.C.S.E., L.M., has been appointed Honorary Physician to the West Norfolk and Lynn Hospital, vice Cossar, resigned.

DAVISON, F. V., M.B., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

GOODWIN, E. D., F.R.C.S.E., has been reappointed Medical Officer for the Mayfield District of the Ashbourne Union.

GRAY, J. R., M.B., C.M., has been appointed Medical Officer for the Borrowby District of the Northallerton Union, Yorkshire, vice Buchanan, resigned.

HALL, J., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the Leigh Urban Sanitary District.

HAYWARD, W. T., L.K.Q.C.P.I., M.R.C.S.E., has been appointed House-Surgeon to the Liverpool Infirmary for Children, vice A. James, M.B., resigned.

JACKSON, W., L.R.C.P.Ed., has been appointed Medical Officer to the Skipton Union Workhouse, vice Birtwhistle, resigned.

JUMEAUX, B., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Physician to the North Staffordshire Infirmary, Hartshill, vice Walter.

LLOYD, W., M.B., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 1 District and the Workhouse of the Carmarthen Union, and Medical Officer of Health for the Carmarthen Sub-district of the Carmarthen Rural Sanitary District, vice D. Lloyd, M.R.C.S.E., deceased.

MAHON, C. J., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Easkey Dispensary District of the Dromore West Union, Co. Sligo, and Medical Officer to the Workhouse, vice Scott, appointed to the Ballina Dispensary District.

MATTHEWS, J. S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Cloghan Dispensary District of the Stranorlar Union, vice Keys, appointed to the Castlefin Dispensary District of the Strabane Union.

MILES, G. E., M.R.C.S.E., has been appointed Assistant Medical Officer (temporarily) to the North Wales Counties Lunatic Asylum, Denbigh, vice Ellis, appointed Medical Officer to the Dinas Mawddwy Slate Quarries &c.

MILNES, E., M.R.C.S.E., has been appointed a Surgeon to Out-patients of the Lock Hospital and Asylum, vice Shillitoe.

PITT, C. W., M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for the No. 1 District of the Malmesbury Union, Wilts.

PURCELL, F. A., M.D., has been appointed a Physician to the Westminster General Dispensary, Gerrard-street.

QUINTON, R. F., B.A., M.D., C.M., L.M., M.R.C.S.E., has been appointed Resident Medical Officer and Secretary to the Newark-on-Trent Hospital and Dispensary, vice Maybury, appointed a Medical Officer to the Colchester Union.

SHAIN, J. M., M.R.C.S.E., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

SHILLITOE, B., F.R.C.S.E., has been appointed a Surgeon to the Lock Hospital and Asylum, vice Lane, resigned.

SMITH, S. J., M.D., L.R.C.S.E., has been appointed Medical Officer for the Etwall District of the Burton-on-Trent Union, vice Kitchener, resigned.

TWIGGE, T. N., M.R.C.S.E., has been reappointed Medical Officer for the Hartington District of the Ashbourne Union.

WALTER, W., M.B., has been appointed House-Surgeon to the North Staffordshire Infirmary, Hartshill.

WILLAN, R. M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the North Witchford Union, vice Wilson, resigned.

WINSLOW, Dr. L. S. F., has been appointed Lecturer on Psychological Medicine at the Charing-cross Hospital Medical School, vice Hunt, deceased.

Births, Marriages, and Deaths.

BIRTHS.

ATTHILL.—On the 25th ult., at St. Osyth, the wife of R. C. Atthill, L.R.C.P.Ed., of a son.

GRAY.—On the 20th of Oct., at Cinnemara, Jorehaut, Assam, the wife of Edward Gray, M.B., C.M., of a son.

LOWNDS.—On the 23rd ult., at Egham-hill, the wife of T. M. Lownds, M.D., of a son.

RICE.—On the 28th ult., at Cadogan-place, the wife of M. W. Rice, M.D., of a daughter.

STURTON.—On the 23rd ult., the wife of H. W. S. Sturton, M.R.C.S.E., of Greenwich, of a daughter.

TAYLOR.—On the 25th ult., the wife of Dr. H. O. Taylor, of Castle-gate, Nottingham, of a daughter.

MARRIAGES.

BREBNER—SIMPSON.—On the 28th of Oct., at Christ Church, Georgetown, Demerara, William Brebner, M.B., C.M., M.G.C.U.E., H.M.P.S., to Ellen Innes, eldest and only surviving daughter of James B. Simpson, S.C.P. No Cards.

M'KELVIE—GAEDICKE.—On the 22nd ult., at Berlin, civilly, and on the same day at the British Embassy, by the Rev. R. Bellson, English Chaplain, Robert M'Kelvie, M.D., of Cromer, Norfolk, to Mathilde, only daughter of the late Johann Daniel Gaedicke, Ph.D., Rector of Prenlau, Prussia.

RIGBY—THOMPSON.—On the 23rd ult., at Barry-road Chapel, Peckham-rye, James Arthur Rigby, M.B., of Winckley-square, Preston, Lancashire, to Sarah Elizabeth Atherden (Lillie), eldest daughter of Joseph Thompson, Esq., of Manor House, Camberwell, Surrey.—No Cards.

DEATHS.

BROWN.—On the 19th ult., at Bartholme, Cumberland, Robert Brown, F.R.C.S.Ed., aged 43.

HARDY.—On the 9th ult., at Warrington, Geo. Willmott Hardy, M.R.C.S.E., aged 74.

LEITH.—On the 28th ult., at Etherton-lawn, near Tunbridge-wells, Dr. A. H. Leith, late Inspector-General of Hospitals, Bombay Medical Service.

PETERSON.—On the 5th of Oct., at Bombay, Richard A. Peterson, M.D., aged 29.

READY.—On the 26th ult., at Bootle, Michael Ready, M.R.C.S.E., aged 59.

TORRANCE.—On the 25th ult., at Dunchurch, David Torrance, M.D.

TULLOCH.—On the 27th ult., at Pembridge-place, Bayswater, James S. Tulloch, M.D., aged 56.

WALES.—On the 31st of Oct., at Wimbotsham, Norfolk, Robt. J. Wales, L.S.A.L., aged 79.

WEBSTER.—On the 24th ult., Wm. H. Bayley Webster, L.S.A.L., of Woodbridge-road, Ipswich, aged 83.

WILSON.—On the 16th ult., at Clachanton, Ayrshire, W. Wilson, L.F.P. & S. Glas., aged 60.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Hermann's Physiology.
The Climate and Diseases of America during the Revolution.
Dr. Peau: De la Forcipressure.
Mr. Gorman: Christian Psychology.
Mr. Brunton: Experimental Investigation of the Action of Medicines.
Dr. Bandny: Lectures on Diseases of the Nervous System.
Haeckel's History of Creation. Vols. I. & II.
Holmes's System of Surgery.
A Manual of Hospital Nurses.
Dr. Black: Bright's Disease.
Transactions of the Pathological Society.
Dr. Bulkley: Archives of Dermatology. Vol. I.
" " Analysis of 1000 Cases of Skin Diseases.
Dr. Lindsay: The Superannuation of Officers in British Hospitals for the Insane.
Dr. Macdonald: Water Analysis.
Dr. Ziemssen: Cyclopædia of the Practice of Medicine. Vol. V.
Professor Küss: New Manual of Physiology.
Quain's Anatomy.
Mr. Storie: The Dietetic Errors of the People.
Dr. Frieberg: Gerichtsärztliche Gutachten.
The Second Christian Epoch. By a Christian.
Vernon Galbray; or the Empiric. Second Edition.
Mr. Milne: German Grammar.
White's Grammar School Texts. Virgil's Æneid: Eutropius.
Lamartine's Toussaint L'Ouvertare.
Dr. Macdonald: On Death, and how to divest it of its Terrors.
Mr. Smiles: On Thrift.
Christianity versus Paganism.
Strange Tales from "Vanity Fair," by Silly Billy.
Vanity Fair Album.
Messrs. Cassal and Marcher: Graduated Course of Translations from English into French.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, DEC. 2ND, 1875.

Date	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Nov. 26	30·02	N.E.	33	55	...	37	31	...	Overcast
" 27	30·00	N.E.	35	36	...	39	32	...	Snowing
" 28	30·15	N.E.	35	36	...	39	35	...	Overcast
" 29	30·05	N.E.	...	35	...	38	34	...	Overcast
" 30	29·87	N.E.	...	33	...	39	31	...	Overcast
Dec. 1	29·86	E.	...	31	...	35	29	...	Snowing
" 2	29·81	N.E.	...	33	...	...	30	0·08	Snowing

Notes, Short Comments, and Answers to Correspondents.

THE EUCALYPTUS GLOBULUS.

SOME time ago the Army Sanitary Commission forwarded a memorandum to the Government of India regarding the alleged benefits which were expected to follow the cultivation of the Eucalyptus globulus in malarious districts. The reports that have since reached this country from India are such as finally to dispose of the question. It appears that the Government of India have been importing seeds of the tree for many years past at a considerable expense, but that the only places where it has been cultivated with success are Ranechket, in the South-West Provinces, and the Neilgherries, in the Madras Presidency. All attempts to rear it in the plains, where its alleged anti-miasmatic qualities would be most appreciated, have proved failures. Mr. O'Connor observes: "It is a native of the cool temperate zone of the Australian continent and Tasmania, and its unsuitability to the tropical plains of this country seems now manifest." After enumerating the virtues currently attributed to the tree, he adds: "This catalogue of the virtues of the blue gum tree makes me think of the wonderful powers supposed 300 years ago to be possessed by that 'most holy herb,' tobacco." Clearly such statements want confirmation before they can be accepted. They bear, indeed, on their face the mark of exaggeration. In one of the papers in which an account of the properties of the tree is given it is stated that the British Government has largely grown it in India and on the West Coast of Africa, with astonishing results in the diminution of fever. Now, we know that in India no such results have been obtained, and on the West Coast of Africa attempts are only now being made to introduce the tree. Mr. Broughton, the Government quinologist, says that he has examined the bark and leaves of the Eucalyptus globulus, and that neither quinine, quinidine, chinchonidine, nor chinchonine is contained in the plant in any proportion.

A Subscriber should get the information from his medical attendant.

ANIMAL VACCINATION.

To the Editor of THE LANCET.

SIR,—I was glad to see from the short report in your last impression that the subject of animal vaccination has been brought forward for discussion at the Medical Society of London. It is a question of the utmost importance at the present time. The growing distrust of vaccination and of vaccine lymph in this country, especially in the large towns, must be patent to all. It is being used by anti-vaccination agitators for their own purposes, and much mischief will be caused if we do not supplement our present vaccine supplies, especially in times of epidemic or vaccination panics, with a lymph which shall be above suspicion. I have shown elsewhere* at length that the Russians are before us in this matter; that in the Foundling Hospital at St. Petersburg, where most of the public vaccination is carried on, calf lymph has been used side by side with human lymph for the last five or six years. It is equally protective, and the failures in primary operations have, by care and perseverance, been reduced as low as two per cent. Surely what is possible in St. Petersburg is possible in England, and difficulties which have been surmounted by Germans in Russia should not be an impassable barrier to the countrymen of Jenner. Our Government should take up the question, and put it to the practical test of experiment and observation; for it would be worth much to have a lymph which should command public confidence, as well as admit of indefinite multiplication in the event of an epidemic. Difficulties might arise in regard to its carriage and storage; then use it fresh on the spot, and send reliable human lymph abroad. The use of calf lymph might not, it would not, do away with the many constitutional skin affections which follow the first irritation of the system, whatever it may be, whether teething or vaccination, in scrofulous subjects; but these could no longer be paraded as a terror to ignorant or nervous persons under the head of vaccino-syphilis.

The difficulties attending "animal vaccination" have been so strongly set forth by Dr. Seaton in the Report of the Medical Officer of the Privy Council for 1869 that there is danger lest its more encouraging features should be left out of sight. If Dr. Drysdale's paper serves to revive an interest in the subject, and to put the question more fairly before the profession, I think we may yet see calves attached to every large vaccination station, and the confidence of the public in the efficacy and safety of vaccination restored. I am yours faithfully,

Cheltenham, Nov. 24th, 1875. EDWARD T. WILSON.

* St. George's Hospital Reports, vol. for 1875: Questions connected with Vaccination, by E. T. Wilson.

AUDI ALTERAM PARTEM.

DR. METZQUER lately read two papers before the Academy of Medicine of Paris, wherein he strives to prove the non-inoculability of tubercular matter. "I have had the honour," says the author, "of bringing before the Academy 31 experiments, which prove that, with non-tubercular matter, lesions may be produced identical with those excited by tubercular substance. 13 experiments prove that the nodules thus produced may become absorbed. These 44 experiments added to those of my first paper amount to 130 experiments, controlled by Messrs. Morel, Michel, and Peltz. I have shown that the nodules resulting from these inoculations may become absorbed, and really disappear in the majority of cases. I have proved that we can, at will, produce pulmonary or, speaking more generally, organic lesions, which have been erroneously looked upon as tubercular. To prove this, we need but inoculate solid matter of sufficient volume and easily reduced, either putrid or impregnated with putrid matter." The author then reviewed, critically, M. Villemin's experiments and the meaning he attaches to them. Finally, M. Metzquer said: "I maintain, after 130 experiments, that the nodules developed after the above-named inoculations have no analogy with tubercles, because—1st, they become absorbed in the majority of cases; 2nd, because they can be produced by the inoculation of different substances; 3rd, because, when experiments are undertaken with actual tubercular matter, no results are obtained except that matter be in an advanced stage of decomposition. The committee appointed to report upon these papers is exceptionally numerous, comprising Messrs. Villemin, Hérard, Colin, Henri Roger, T. Guérin, Hirtz, and Béhier. The first three are well known for their labours on this intricate question.

Mr. George Brown is thanked. The matter is unworthy of our notice.

TYPHOID AND DISTEMPER.

To the Editor of THE LANCET.

SIR,—I have much pleasure in answering the questions put by your correspondent, Mr. T. Paton, and am glad to find that the subject has been taken up by him as a veterinary surgeon.

Before communicating the evidence, I took every possible care to find out whether there could be any source other than that mentioned which could have produced the disease. I could find nothing, and therefore concluded that the dog alone was the source from whence the poison came. The house is perfectly familiar to me, and therefore I can speak of the sanitary arrangements with confidence. The drainage was thoroughly looked to only about a year ago. The cesspool is ventilated by a pipe passing up above the roof of the house, and the closet is in an entirely distinct part of the house to that occupied by the man. The family had only left the house about three weeks before the man was attacked, so there was no time for any alteration in the ordinary arrangements. The house was also occupied at the time by a housekeeper and several children; but no one else was attacked save his friend who visited him at the stable, and who was present when the stench was experienced. Immediately on discovering the nature of his disease, he was removed to his own room over the stable. No other cases have occurred in the neighbourhood, so the evidence still points to the dog as the only source from whence the poison was derived.

I am, Sir, yours faithfully,

Nov. 27th, 1875. H. H.

MEDICAL ADVERTISING.

THE *Western Gazette* seems to be getting a favourite medium through which medical men who are averse to hiding their lights may notify their accomplishments to an admiring public. A registered practitioner lately sought by means of an advertisement in its pages to obtain at once a wife and a practice. In a more recent number of the paper, and under the heading of "Trade Announcements," we find the following advertisement:—

"Dr. Brennand, having purchased the late Mrs. Culling's practice at West Lydford, feels justified in calling the attention of his patients to the fact, and in trusting to a continuance of their goodwill towards the same. Lydford House, West Lydford, Nov. 16th, 1875."

SUN STEAM ENGINES.

M. MOUCHOT, Professor of Mathematics at Tours, brought lately before the Academy of Sciences of Paris an apparatus, by which the rays of the sun are concentrated, and heat the boiler of a steam engine. It consists of a conical reflector, a gas receptacle, and a boiler with blackened walls. The reflecting side of the mirror is turned towards the axis of the apparatus at an angle of 45°, which allows of a short and powerful concentration of heat. The rays come in contact with the boiler, and heat the same. It requires only eight minutes to bring five quarts of water to the boiling point. M. Mouchot has erected a large engine at Tours, which sets in motion an engine of one-horse power, quite regularly, from the rising of the sun to eight o'clock at night. The Academy has appointed a committee to report upon this invention. The names of the members are a guarantee that this learned body were much impressed by M. Mouchot's communication. They are, Messrs. Dumas, Bertrand, Faye, Hervé-Mangon, and Lesseps.

Dr. Sinclair, (Dublin.)—The subject shall be noticed next week.

CALABAR BEAN.

To the Editor of THE LANCET.

SIR,—I should feel much obliged if you or any of your correspondents would tell me where Dr. Munro's cases of tic cured by Calabar bean, referred to by "M.D. Lond." in your impression of Nov. 20th, are to be found. I am anxious to try this same treatment to an obstinate case of neuralgic (periodic) headache, which has hitherto resisted all treatment, but before doing so wish to know more of the details. Yours &c.,

December, 1875. INQUIRENS.

"CONFECTIONERY."

THE *Pall Mall Gazette* states that while cooks in this country have yet much to learn, confectioners are almost too skilful in their art, and occasionally manufacture delicacies out of the most horrible compounds. An example of what apparently may be done in this line is afforded by an application made the other day to the magistrate at the Manchester Police Court, by the superintendent of markets, for an order for the destruction of thirteen tubs of unwholesome butter which had been found on the premises of a wholesale confectioner, whose employés were making it up with flour into paste for what are termed "Eccles cakes." The city analyst, who had examined a sample of this mixture, said that "it had evidently been made up of the refuse of butter casks, and was altogether unfit for human food. It smelt very badly, and there were evidences of decomposition, owing to too large a proportion of fatty acids." A promise being given on behalf of the confectioner that the stuff should not be applied for the purpose of confectionery, but should be given up to a soap-boiler in the presence of an inspector, an order was made by the magistrate accordingly. A summons, it was stated, would be issued against the confectioner for having the "butter" in his possession.

VOMITING AFTER THE ADMINISTRATION OF MORPHIA EITHER PER OREM OR PER CUTEM.

DR. FRICKENHAUS has found that he can avoid this unpleasant symptom by using atropine in combination with the morphia. The solutions used are two per cent. of morphia, and one per cent. of atropine. The syringe has twenty-five cross lines filled with the morphia solution, and five with atropine. Of course cases may be met with where atropine is contra-indicated, and it may also be objected that vomiting is hardly so frequent after the absorption of morphia as the author seems to think.

Mr. Thomas Bell must excuse us. It would be contrary to our custom to do so.

CAMPHOR POISONING.

To the Editor of THE LANCET.

SIR,—On Tuesday, Nov. 9th, I was hastily summoned at eight o'clock in the evening, eight miles into the country, to see Alice T——, aged five years, who by mistake had administered to her by her mother half an ounce of liniment of camphor in place of her mixture. The child was just recovering from an attack of scarlet fever, which she in common with her two brothers had contracted at the village school. The liniment in question was sent to anoint their bodies with, and had been put side by side with the mixture; hence the mistake. She at once complained of its taste, and burning of the mouth, throat, and stomach, and in ten minutes was sick, hot water being given to her to help its removal from the stomach, and on my arrival I saw two or three ounces of half-digested cake and fluid, strongly impregnated with camphor and oil particles, floating on its surface. During the vomiting, and in fifteen minutes (so I was told) after its administration, violent convulsions came on. When I saw her, three hours afterwards, she was black in the face; the body arched backwards; the teeth so firmly clenched that nothing could separate them; the eyes were wide open, pupils quite insensible to a strong light, but neither contracted nor dilated; the eyeballs were rapidly rolling from side to side, and there was great subsultus tendinum; the pulse was at times hardly to be felt, at others it was full and bounding; the breathing was gasping, with long intervals between each gasp, so that those watching often thought the child was dead; the surface of the body was warm, but not hot; I had no thermometer with me in my hurry. The treatment I adopted was to put the body into warm water, and apply to the face and head cold affusion, which very soon told upon the congested condition of the brain, and in an hour quite changed the colour of the skin to a light florid red; the pulse soon afterwards became more regular, but the convulsions did not quite disappear for seven hours. At one time I felt inclined to abstract some blood, but the irregular state of the pulse made me afraid she would die if I did so. As soon as she could swallow, three-grain doses of bromide of potassium were given, and repeated every two hours for four doses. After that she sank into a quiet sleep, and the next day, with the exception of a blistered condition of the tongue and a soreness at the stomach, which milk and fluid magnesia soon removed, she was quite well.

I remain, Sir, yours truly,

Bridgnorth, November, 1875. W. THURSFIELD, M.D.

A TYRANNICAL PARAGRAPH IN AUSTRIAN LAW.

THE Government are introducing a new penal code into Austria, and both Houses are now discussing it. Paragraph 455 enacts that medical men, midwives, and apothecaries are liable to a fine of 100 florins or less for refusing or delaying their assistance in urgent cases. Petitions, signed by Medical Societies, are pouring into the Houses, complaining of this clause. It is evident that the application of it would be fraught with great difficulty, as it is not easy to define what an urgent case is. Besides, such a clause is an attack upon individual liberty, and, from the general bearing of the medical profession, perfectly uncalled for.

CHLORAL AND ITS EFFECTS.

To the Editor of THE LANCET.

SIR,—I should be obliged if, through the medium of your extensively circulated journal, I could obtain any information upon the following points:

1st. Whether the taking of chloral for several years, varying in amount from at first twenty to thirty grains up to of late 100 to 120 grains per diem, has been known to induce a condition of gastro-enteritis, characterised during life by frequent vomiting, great abdominal tenderness, pain, and constipation, with the passage of hardened fæces covered with opaque white mucus; and also after death by a highly injected state of the whole alimentary canal.

2nd. Also, whether such use of chloral has been known to produce some perversion of the moral feelings, with complete alteration of disposition and temper.

I am, Sir yours &c.,

December, 1875. F.R.C.P.

CHARITY AND HUMANITY.

THE details of a curious will case were lately made public, which showed that the testatrix must have been actuated by an unusual consideration for dumb animals. After evincing her charitable feelings by bequeathing £2000 to the Cancer Hospital, and £500 each to St. Thomas's Hospital, Guy's Hospital, and the Earlswood Asylum for Idiots, the deceased lady directs that the cob mare and greyhound which were her late husband's are not to be sold. The mare is to be kept in a comfortable, warm, loose box, as it has been kept since her husband's death; is not to do any work either in or out of harness, and its back is not to be crossed by any member of her late husband's family, but is to be ridden by some person of light weight not more than four days in each week, and not more than one hour in each day, at a walking pace. A sum of £65 per annum is left for the support of the mare, and £5 per annum for the keep and care of the greyhound.

A HANDSOME PRESENT.

IN Germany, France, and other countries, the recurrence of a Christian name in the almanack is celebrated by those who have been given that name at their baptism. Professor Dittel, of Vienna (who lately recommended the elastic ligature), rejoices in the Christian name of Leopold; and on the occasion of Leopold's day, quite lately, Baron Sina, one of his patients, sent him a beautifully worked casket, in which were twelve bank notes of 1000 florins each (about £1000). It is quite refreshing to record such acts of recognition on the part of patients towards their medical attendants.

Mr. J. Bunting is thanked. It is to be regretted that such circulars are issued by medical men.

TREATMENT OF RINGWORM.

To the Editor of THE LANCET.

SIR,—In your issue of Nov. 20th I observe a notice of the treatment of ringworm by means of a solution of boracic acid, as recommended by Surgeon-Major Watson. The plan I have adopted for many years is quite as simple, more easily applied, and requires no precautions as to the parts being prepared, or care taken that they should afterwards be allowed to dry, that the acid be not rubbed off. Practising among a class where the disease appears frequently, it has been my method to paint the parts affected with the ordinary tincture of iodine. The brush is brought not only over the spot, but a little beyond the margins. This I do on three successive days, and then order the patient to appear a week after the last application for inspection. Not in one case in a hundred have I to repeat the application. The advantages of this plan of treatment are:—1. It is easily and quickly applied. 2. It gives no pain. 3. It requires no dressing of any kind, and cannot be removed by accident. 4. The power of contagion is at once arrested. 5. It never fails to effect a cure. I am confident that whoever tries it will never think of using anything else.—Yours truly,

Kinghorn, Nov. 24th, 1875. JAS. WELSH, M.D.

INCONTINENCE OF URINE IN CHILDREN.

DR. ULTZMANN thinks that the chief cause of incontinence of urine in children lies in the weak state of the sphincter, through which circumstance the detrusor acquires unusual power. He advocates the induced current. A small brass plug is to be placed in the rectum, and one of the poles connected with it, whilst the other may be placed over the symphysis pubis or the upper part of the thigh. The sittings should last from five to ten minutes. Dr. Ultzmann mentions nine cases, in some of which he met with success. The use of belladonna remains, however, of great importance in these cases.

M.R.C.S.—They can be prosecuted under the Apothecaries Act, and fined £20 if the magistrates perceive the legal offence.

PRESERVATION OF MORPHIA SOLUTIONS.

To the Editor of THE LANCET.

SIR,—I notice in the issue of THE LANCET of Oct. 30th an article to the effect that M. Vidal has succeeded in rendering solutions of morphia "less liable to spontaneous change" by the addition of a certain amount of chloral. Having been unfortunately obliged during the past five months to employ hypodermic injections of morphia upon myself, I have found, after over 700 trials, that a solution of any strength of the sulphate (I use sixteen grains to the ounce), if made with boiling water, with the addition of one minim of carbolic acid to each ounce of the solution, will not only preserve it clear and free from deposits of all kinds for an indefinite period, but may be employed without the slightest particle of soreness ever following the puncture of the hypodermic needle. This I have found to be the case, not only in my own individual instance, but in scores of others where I have used it.

Yours respectfully,

New York, November 15th, 1875. CHARLES A. BUDD, M.D.

VIVISECTION EXTRAORDINARY.

THE *Evening Echo* of the 17th ult., in recording the purport of a telegram from Berlin to a contemporary, makes a revelation which must, we think, prove a little startling to English readers. Certain rumours against the solvency of an eminent banking firm of Berlin and Stettin had, it appears, been set afloat. These having turned out to be groundless, their author was, we are told, summarily handed over to the "public prosector." This is indeed horrible. Are there no Huttons in Germany?

A. B.—Insanity is not a ground for divorce. Cruelty is a ground for a judicial separation, and when coupled with adultery forms ground for divorce. If the party complained of were shown to be lunatic during the whole time of the occurrence of the acts constituting legal cruelty, we think that it would be difficult to obtain a judicial separation; but if the party continued lunatic, confinement in an asylum would follow as a matter of course, and thus there would be separation, though not technically "judicial."

MICROSCOPICAL PREPARATIONS.

WE have received some specimens of histological preparations (normal and morbid), prepared by Arthur C. Cole and Son, of Everton, Liverpool. They are certainly admirable sections, and are beautifully mounted. To the teacher in search of typical specimens for the purposes of demonstration, such preparations as these must be invaluable. From the list of preparations also forwarded to us, we find many objects included which are not easily obtained, and the possession of which is essential to the accurate study of histology. The preparations are divided into three series of twenty-four specimens each: the one including injected specimens, the other normal, and the third pathological structures.

THE LATE PROFESSOR SCHUH.

THE bust of this eminent surgeon was lately unveiled in the General Hospital of Vienna. The meeting was very numerous, and Dr. Salzer delivered an eloquent discourse, in which he dwelt on the skill and genius of Dr. Schuh as a surgeon, and on his qualities as a man and a teacher. The ceremony ended in quite a German manner, by a festive concerted piece, sung by the Choral Society of the Faculty.

Dr. Wardell will see that we have alluded to his excellent letters, which will do good in the newspapers. Of course they will have no effect on the anti-vaccinationists. It is their peculiarity that the more reason there is in an argument, the more are they insensible to its force. And we have given up reasoning with them. But such letters as those of our correspondent do great good in educating and informing the public.

Studens.—Consult our Students' Number.

SALIVARY CALCULUS.

DR. ULTZMANN mentioned before the Austrian Medical Society that he had a short time ago under his care a patient who presented a tumour of the cheek, which broke, and turned out to be the seat of a salivary calculus. The latter is as large as a hazel-nut, very hard, and composed of phosphate of lime. In general these stones are brittle, and composed of carbonate of lime.

WE are compelled by the great pressure on our space this week to postpone the publication of several articles and communications.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson; Mr. Savory, London; Dr. G. Johnson, London; Dr. Corfield, London; Prof. Lecorché, Paris; Mr. Wagstaffe, London; Dr. Sutherland, London; Mr. Marshall, Moulton; Mr. Bell, Uppingham; Mr. Gibson, Finsbury; Dr. Wilson, Cheltenham; Mrs. Baines, London; Mr. Mayne, London; Dr. White, London; Dr. Bon, Paris; Mr. Fleming, Holbrook; Dr. Taylor, Nottingham; Mr. J. G. Brown, London; Messrs. Sampson Low and Co., London; Dr. Nankivell, Chatham; Mr. Harris, London; Dr. Rogers, Ottawa; Messrs. Brown and Polson, London; Mr. Goyder, Bradford; Mr. Purvis, Greenwich; Dr. Sinclair, Dublin; Dr. D. Powell, London; Dr. Welsh, Kingborn; Mr. Howse, London; Mr. Tindall, London; Dr. Leadon, London; Mr. T. Smith, London; Mr. Walker, Wakefield; Mr. Tegg, London; Mr. C. B. Murray, London; Mr. Whitaker, London; Dr. Weir, Nottingham; Mr. Sheer, Cardiff; Dr. Parkin, Brighton; Mr. Humphreys, London; Mr. Pick, London; Dr. A. Meadows, London; Dr. Charteris, London; Mr. J. Graham, Southsea; Dr. John Williams, London; Mr. Watkin; Mr. Bunting, Tottenham; Mr. Potts, Newcastle; Dr. Gilland, Wallingford; Mr. Elliott, London; Mr. W. D. Jones, London; Mr. Huss, Stirling; Dr. Fox, Winchester; Dr. Hayward, Liverpool; Mr. Pike, Gloucester; Dr. Davies, Ebbw Vale; Mr. Shenton, Edinburgh; Mr. Black, Chatham; Mr. Edwards, Bury St. Edmunds; Mr. B. Bevan, London; Mr. Patterson, Hailsham; Mr. Danvers, Uppingham; Dr. Budd, New York; MY J. G. da Cunha, Port Louis; Dr. Humble, Corfe Castle; Mr. Harris; Mr. Colman; Mr. Ensor, Port Elizabeth; Mr. Morris, London; The Secretary of the Harveian Society; A Subscriber; M.R.C.S., Leeds; W. H. P.; The Editor of *Vanity Fair*; Surgeon; Studens; J. S.; R. W. P.; Delta, Chesterfield; The Registrar-General of Edinburgh; G. L.; Rusticus; M.D.; J. A.; L. D. Y.; C. F.; F.R.C.S., London; The Secretary of the Necropolis Company; A. K. C.; A. B., Norwich; A. K. C.; Peter Plain; The Editor of the *Veterinary Journal*; Istros; Inquirens; H. H.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Rigby, Preston; Mr. Wigg, Tunbridge; Mr. Whalley, Bradford; Mr. Thomas, Manchester; Mr. Vanes, Birmingham; Dr. Dickinson, Stalybridge; Rev. J. E. Clarke, Battersea; Mr. Walker, Corwen; Mr. J. Hebblethwaite, Bawtry; Mr. Evans, Seaford; Mr. Blasson, Edgware; Mr. Barnett, Weston-super-Mare; Dr. Kennedy, Fort William; Alpha, Durham; J. J. B.; M. L.; M.D.; H. M.; Medicus, Southport; L. L., Feltham; W. H.; Medicus, Welshpool; B. B.; L.R.C.P.; Douceur; K. K., Billingborough; Alpha, St. Helens; M. M.; Medicus, Newcastle; Alcazar; B. A.; P. W.; J. R.; T. E.; J. C. D., Petworth; M.D. Lond.; Medicus, Sheffield; T. M.; S. L. H., Islington; P. M., London; L. S. A., Padstow.

Newcastle Chronicle, Liverpool Post, Western Morning News, Birmingham Morning News, Welshman, Local Government Chronicle, Manchester Guardian, Record, Western Gazette, Weston-super-Mare Gazette, Surrey Advertiser, East London Observer, West Cumberland Times, Cork Constitution, Staffordshire Advertiser, Oldham Standard, Wrexham Advertiser, and *Keighley News* have been received.

Medical Diary for the ensuing Week.

Monday, Dec. 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Mr. Maunder: Exhibition of Arm seven years after Excision of the Elbow-joint (living specimen).—Mr. Alfred Freer (of Stourbridge), "On a Case of Impalement, with Post-mortem results four and a half years afterwards."—Dr. Robt. Lee, "On different forms of Pessaries."

Tuesday, Dec. 7.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Molluscum Contagiosum; Dilatation of Bile-ducts; Aneurism of Aorta; Obliteration of Superior Cava; Ulceration of Duodenum extending into Vena Porta; Disease of Pulmonary and Tricuspid Valves; Hæmorrhagic Periostitis; Fatty Tumour of Cord; Congenital Deficiency of Common Bile-duct, and consequent Cirrhosis; Injury to Radius; Deformity from Rheumatic Gout; Cirrhosis of Liver in a Child; Recurrent Epithelioma in Chest and Toe after successful Excision of Tongue; Cancer of Heart and Supra-renal Capsules; Cancer of both Breasts and Ovary; Tumour of Clavicle; Aneurism of Aorta opening into Stomach; Arrest of Development of both Forearms; Report of Sequel to Dr. Walker's Case of Recurrent Sarcoma of Leg; Embolic Infarction in Heart Muscle; &c. &c.

Wednesday, Dec. 8.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
EPIDEMIOLOGICAL SOCIETY. — 8 P.M. Dr. John Wortabet (Physician to St. John's Hospital at Beyrout): "Sketch of the recent Cholera Epidemic in Syria."

Thursday, Dec. 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Harveian Lectures: Dr. Sibson, "On Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood Contamination."

Friday, Dec. 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. — Dr. Donkin, "On a Case of Diabetes treated with Skim-milk."—Mr. Haward, "On a Case of Lymphadenoma."—Dr. T. S. Dowse, "On a Case of Thrombosis of Cavernous Sinus; Sudden Loss of Vision; Hæmorrhage into Anterior Lobe."—Mr. Venning, "On a Case of Congenital Tumour."

Saturday, Dec. 11.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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